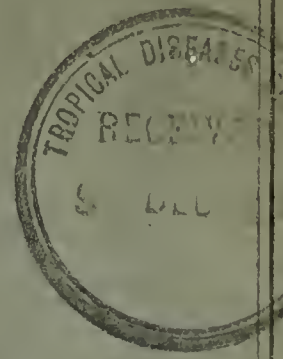
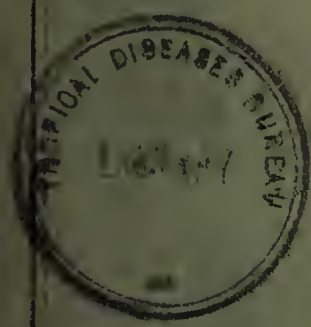


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CORPORATION OF MADRAS.



(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

[Health Officer]

Health Department.

of the City of Madras

FOR THE YEAR

1923.

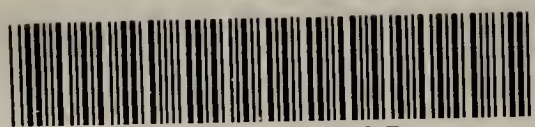
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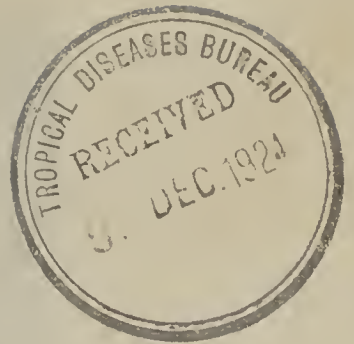
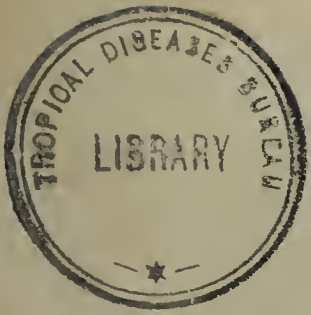
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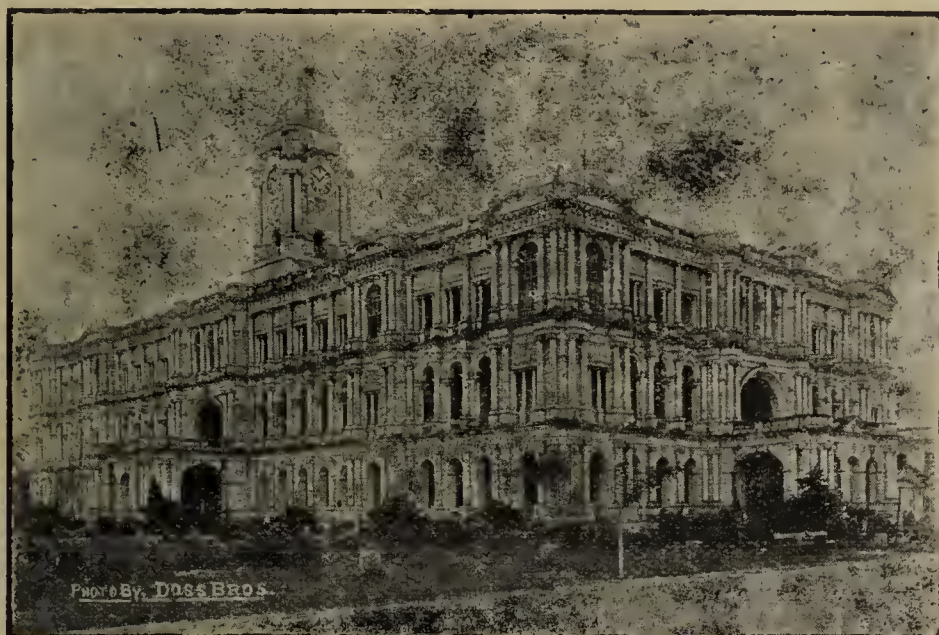
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CORPORATION OF MADRAS.



(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

Health Officer

of the City of Madras

FOR THE YEAR

1923.

MADRAS :
PRINTED BY S. MURTHY & CO.,
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1924.

RECEIVED BY THE DIRECTOR

ANNUAL REPORT

Health Officer
in the City of Kansas
1923

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To

THE COMMISSIONER,

Corporation of Madras,

MADRAS.

Sir,

I have the honour to submit my annual report for 1923. I was in charge of the Health Department during the whole of the year under review. Dr. Isaac, Assistant Health Officer, North Range, proceeded on leave from 16-4-1923 for reasons of health but, unfortunately, died on 31-1-24. His death is a great loss to the Department; he was energetic and enthusiastic in his work and I should take this opportunity to express our sorrow at his untimely demise. Dr. A. M. Krishna Reddy was appointed to act for him as Assistant Health Officer, North Range while Dr. P. Sadasivan continued to be in charge of South Range. Dr. Virasinghe Chinnappa, Lady Superintendent was in charge of Child Welfare work.

The outstanding features of the state of Public Health in the City during 1923 have been a rise in the birth rate, a complete absence of any epidemic and a fall in the general infant death rates. The number of births recorded was 22,975 which is equal to a rate of 43.6 per mille compared with the average figure of 38.8 for the last 10 years. Moreover, the year under review has been one of those years in which the total births has exceeded the total deaths.

19,933 deaths were recorded and the rate is 37.8 per mille. The number of infants under one year that died is 5,837 giving an infantile mortality rate of 254 per 1,000 live-births, the lowest figure ever recorded in the annals of the vital statistics of the city. I have not the least desire to claim too much or too quick returns from the various Child Welfare Organisations at work in the City not excluding that of the Corporation. On the contrary, I have more than once pointed out even at the risk of being misunderstood that under the term infant mortality we club together two dissimilar kinds of infant deaths viz., (1) neo-natal deaths i. e. those occurring within the first four weeks after birth which are apparently not preventable by our present methods; and (2) early childhood deaths i.e. those occurring after the above period and up to one year of life which are undoubtedly amenable to methods now in use; and that so long as this continues to be the case, we can only judge of the results of our work by variations in deaths under the second of these categories and should neither condemn nor merely applaud our present work from the combined figures of infant mortality of both

kinds. For example, the percentage of deaths of infants under one month to total infant deaths during the year 1923 does not show any decrease from that of 1922 or of previous years. Nor is there any notable improvement in the relative proportion of infantile deaths to total mortality during the past 5 years *vide* Table on page 133. Nevertheless it is a matter for supreme gratification to know that the rate of infant mortality, based as it is, on the total births for purposes of comparison from year to year has fallen greatly and that the persevering labours of all our Child Welfare Organisations in the City, both Municipal and private, have begun to bear their first fruits; and it is to be fervently hoped that this fall will continue to be maintained.

Another important feature of administration is the inauguration of a scheme of medical inspection of pupils attending Corporation Schools. A report on this will be found on pages 43 to 60. There are, at present, 12 SubAssistant Surgeons, each of whom is primarily in charge of a dispensary and who devotes part of his time for the medical inspection. In our experience this arrangement does not appear quite satisfactory as their duties conflict with each other. Further more there is the disadvantage of a diversity of the standards of examinations where so many different people are concerned. It seems to be desirable for one or two qualified or Licensed Medical Practitioners to be in whole time charge of this work so that more efficient work and a uniform standard of examination may be ensured.

Details of work carried on by the Public Health Department are found in the body of the report and there is nothing more for me to say except to add that I take this opportunity of thanking my Assistants and all other out-door and in-door officials who have loyally and faithfully helped me in the discharge of duties pertaining to the good administration of the Department. I also desire to take this opportunity of recording my thanks and indebtedness to the Chairman, and members of the Health Standing Committee, to whom I have been under continual obligation for their whole-hearted solicitude and constant sympathy.

I have the honour to be,

Sir,

Your most obedient servant,

K RAGHAVENDRA RAO

Dated, 16-5-1924.

B.A., M.B. & C.M., D.P.H., (Camb.),

Health Officer.

SUMMARY OF VITAL STATISTICS.

Area of the City	...	...	...	27.6 sq. miles or 17,626 acres.		
Population (Census of 1921)	...	...	...	5,26,911.		
Average density	...	...	...	29.9 per acre.		
Density of Divisions 10,11,12,13,14, and 15	...	...	...	91.1 per acre.		
Inhabited houses (Census of 1921)	...	...	...	64,621.		
Total Births registered in 1923 excluding still-births	...	...	}	22,975 against 21,650 in 1922.		
Still-births	...	...	...	1,312 do	1274	do
Illegitimate Births	...	...	...	621 do	625	do
Birth-rate per 1000 of population	...	...	...	43.6 do	41.1	do
Total deaths registered in 1923	...	...	...	19,933 do	22,475	do
Death-rate per 1000 of population	...	...	...	37.8 do	42.7	do
Infantile mortality	...	...	...	5,837 do	6669	do
Infantile mortality rate per 1000 live births	...	...	...	254 do	308.0	do
Percentage of Infant deaths to total mortality	...	...	...	29.3 do	29.7	do
Death-rate from Infectious diseases per 1000 of population	...	...	}	15.5 do	19.6	do
Estimated population in the middle of the year 1923.	...	...	}	5,28,680		
Corrected Birth-rate	...	...	...	43.5		
„ Death-rate	...	...	...	37.7		

VITAL STATISTICS.

Table A on page 124 shows the birth and death statistics for 12 years since 1912.

A marked feature in the climatic conditions of the city during 1923 was the abnormal drought caused by the scanty rainfall, the total
Climate. rainfall for the year being 37.33 inches as against 65.69 inches in 1922 and 61.96 inches, the quinquennial average.

Table B on page 125 shows the quarterly rainfall in the city since 1918.

Till about September 1923 there were fifteen combined medical registration vaccination districts each under a qualified Sub-Asst. Surgeon, designated the Medical Registrar Vaccinator. In
Registration of births and deaths. March 1923 it was proposed that from the point of economy consistent with efficiency, a municipal dispensary might be made a unit of registration and vaccination district and the Sub-Asst. Surgeon in charge of each dispensary might be deputed to attend to dispensary work and also to that of registration of births and deaths and of vaccination, another Sub-Asst. Surgeon or a specially qualified vaccinator being added on in accordance with the requirements of each district. The proposals for redistribution of work were sanctioned by the Council on 22nd November 1923, but before that date, four new dispensaries at Mint Street, Mafuzkhan Garden, Mannady and Nungumbakkam had been opened. In consonance with the proposals and with the approval of the Commissioner no recruitment of medical officers for the four new dispensaries were made, but by a redistribution of the Medical Registrar Vaccinators' divisions, 3 Medical Registrar Vaccinators were spared solely for dispensary work as Medical Officers in charge of the first three dispensaries and for the fourth dispensary which was opened at Nungumbaukkam, the Medical Registrar Vaccinator of that division was directed to be in additional charge of that dispensary. Thus, there were only 12 Medical Registrar Vaccinators instead of 15 from about September 1923, and 31 assistants in charge of registration of births and deaths in the city.

The number of births registered during the year 1923, exclusive of still-births was 22,975 being 1325 more than in the previous
Births. year. The ratio calculated on the census population of 1921 was 43.6 per mille against 41.1 in 1922 and 36.4 in 1921.

Table C on page 125 shows the birth-rate by races and Table D on page 126 shows the rate amongst principal sub-divisions of the Hindu community. The Muhammadan community returned the highest birth-rate of 50.1 and the European community the lowest 27.9.

GRAPH SHOWING BIRTHS, DEATHS & INFANTILE DEATH-RATES BY MONTHS FOR

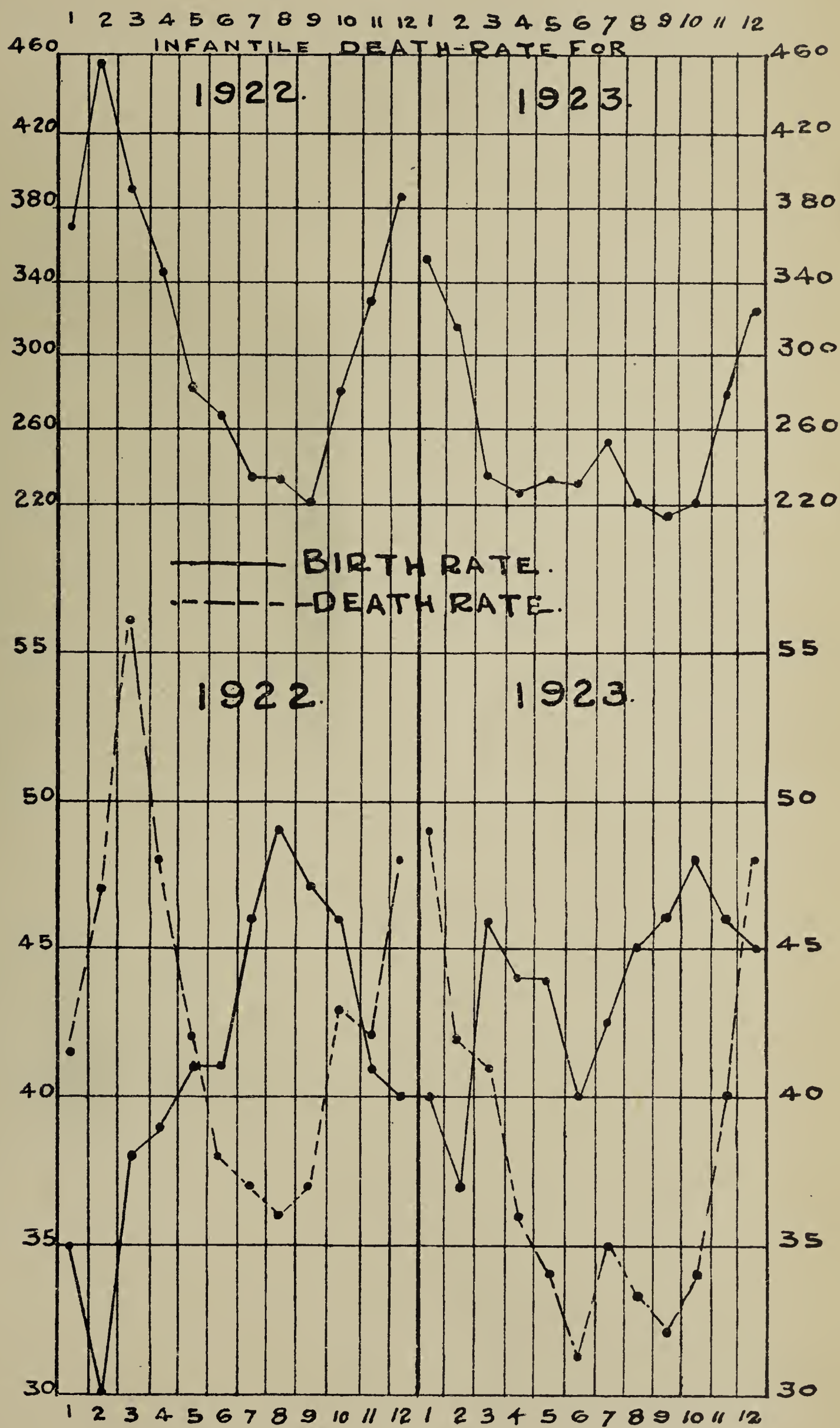
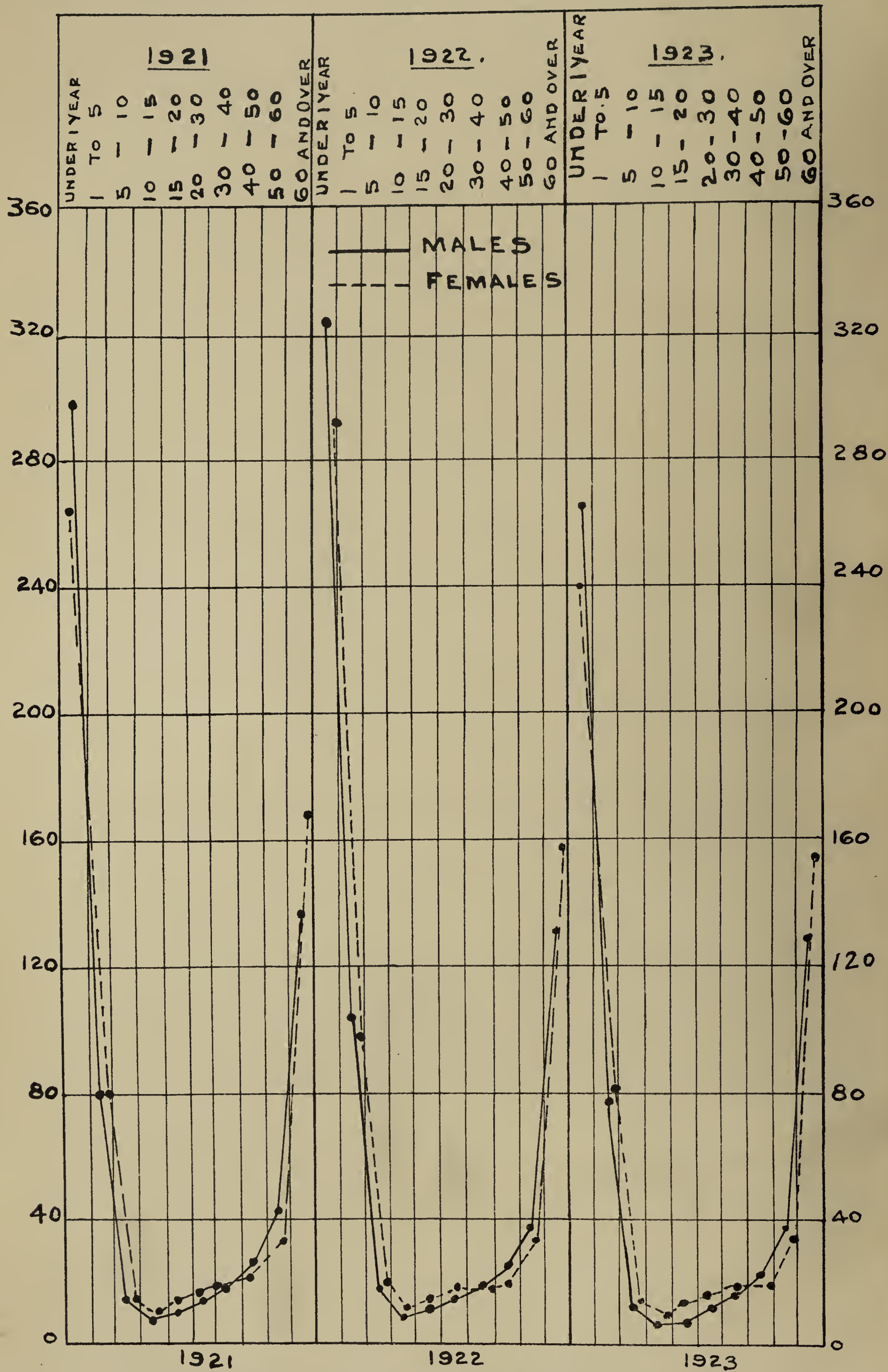


CHART SHOWING THE RELATIVE MORTALITY RATE AMONG MEN & WOMEN AT DIFFERENT AGE PERIODS FOR THREE YEARS ENDING WITH 1923



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1924.

Out of 22,975 births registered during the year, the number of males was 11,749 and of females 11,226, the ratio of males for 100 females being 104.7.

Births by Sex.

Table E on page 126 shows the births in each month during 1923 and 1922. The largest number of births was recorded in October and next in November and March.

621 illegitimate births were registered during the year against 625 in 1922 and 593 in 1921.

Illegitimate Births.

There were 1312 still-births during 1923 against 1274 in 1922 and 1136 in 1921. The number of still-births has been on the increase since 1918, the causes for the same and the inferences that are to be drawn have been stated at length in the report for the year 1921—poverty, unhygienic home conditions, disease in the mother or father or both, and allied causes which bring about some morbid condition in the pregnant mother, are the factors resulting in premature or still-births. A high still-birth rate is commonly associated with a high maternal mortality rate and infant death rate.

Still-births.

The number of deaths registered during the year, exclusive of still-births was 19,933 against 22,475 in the previous year. The mean for the previous five years was 24,522. The ratio of deaths calculated on the census population of 1921 was 37.8 per mille against 42.7 in the previous year and the mean ratio for the quinquennium ending with 1922 was 46.6.

Deaths.

The number of deaths registered among Europeans was 43, Anglo-Indians 288, Indian Christians 886, Hindus 16,324, Mahomedans 2,388 and others 4, ratios being 14.6, 32.0, 27.6, 38.2, 44.9 and 2.1 respectively. These figures are somewhat interesting in that they show that the healthiness or otherwise of any community is largely influenced by the social and economic conditions under which they live.

Class.

Of the total number of 19,933 deaths in the year, 10,146 were among males and 9,787 among females; the number of deaths among males was thus in proportion of 104 to 100 deaths of females.

Age and Sex.

The Chart facing this page represents a tracing showing the relative mortality rates amongst men and women at different age periods for three years ending with 1923. It is observed that the death rates are at their highest at the extremes of life and in both sexes: and at their lowest between the age periods 5-15. Between the age periods 15 to 40 they begin to rise again, but here women die in a slightly larger proportion than men. It is entirely due to the fact that women between the ages of 15 and 40 are exposed to risks attending on child-birth. This is also due to the age and sex constitution of the population of

Madras which is not the same as in Bombay or Calcutta. The proportion of men to women in Bombay and Calcutta at the age period 15 to 40 is 1000: 360 and 1000: 420 respectively, whereas in Madras it is 1000: 940; also in the former cities men between the age periods 20 and 45 constitute 40 per cent of the total population as against only 20 per cent in the latter city—a period of adolescence in which death rates are very low. Conditions of age and sex constitution of any population such as a high proportion of young children and old persons of both sexes, a comparatively low proportion of men in adolescence, and a numerical equality in the number of men and women at almost all the age periods, all these tend not only to raise the general mortality rates but also to maintain the birth rates at a high level. These also bring about a rise in the average age of the population enumerated, which naturally implies a lowered “duration of life” and a consequently high death rate. The mean duration of life of the population in Madras is about 25 years as compared with 35 for Bombay, 40 for Calcutta and 54 for England and Wales. The above said circumstances over which a local administration can have no control, bear a great influence over our birth and death rates including infantile death-rates as apart from those due to social and sanitary conditions.

Table II on page 129 is very interesting and brings out clearly the very high death rate of infants under one month of life. It also shows that this rate with very slight variations is fairly constant in all countries, and as far as this city is concerned, the proportion of infants who die before reaching the age of one month seems to be on the increase since 1919 *viz* Table I on page 130. This mortality, sometimes described as neo-natal, is assumed to be due to ante-natal circumstances or circumstances of birth itself. English statistics of infant mortality clearly show that neither general sanitary improvements nor special organisations for infant welfare work have made much of an impression in this respect.

The problem of infant mortality seems more and more vulnerable after the infant survives the one month period and grows up to 1 year of age. For then environmental conditions do actually play a very great part either, for good or for bad upon the health of the infant. Good mothering, pure cow's milk, improved sanitary and social circumstances should and must make the growing infant immune to various systemic diseases of infancy. This statement is supported by our own statistics as well of those of other countries. Table H, on page 129 shows that while infants under one month die largely from prematurity, congenital defects and debility—neonatal causes—those between 4 and 12 months succumb to Diarrhoea and Dysentery and to Respiratory diseases—post-natal. “The facts available do not justify any statement further than that the range of preventability for infant deaths in the first month after birth appears to be less

extensive than that in the latter months of infancy." A successful issue of the whole problem of infant mortality can be hoped to be achieved by the steady and cumulative effect of the various methods employed to save infant life, and, in particular, to the education and enlightenment, first, of the mother and secondly, of the general public in matters relating to general sanitation and, in particular, to infant care and management. As I have stated often these two parts of our programme should go on side by side and it would be radically wrong to think of infant mortality as a separate and independant entity all by itself, or apart from general sanitary environmental conditions of the people.

A full report on the child welfare work during 1923 will be found on *Child Welfare* pages 71 to 87.
Work.

Causes of Mortality—Infectious Diseases.

Malaria caused 3.9 per cent of the total deaths as against 3.4 per cent *Malaria.* for 1922 and 3.2 per cent for 1921, or expressed in ratio per mille 1.5, 1.4 and 1.2 respectively. Annual form No. X on page 98 shows that 783 persons died of this cause as against 763 in 1922.

There were 51 deaths from Enteric fever during the year giving a ratio *Enteric Fever.* of 0.1 per mille as against 0.1 in 1922 and 0.2 in 1921. The mean ratio for the previous 5 years was 0.1. The number of deaths returned for 12 years is given in the Table below:—

1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
42	51	66	75	49	47	45	52	66	85	74	51

The above figures can by no means be taken as accurate since they represent only those cases notified mainly by the public hospitals.

Fifty-two deaths were registered from this cause, the corresponding *Kala-Azar.* number in 1922 and 1921 being 33 and 24, respectively.

Fifty cases were reported in a sporadic form during the year of which *Cholera.* 21 or 42 per cent proved fatal against 32 attacks and 17 deaths or 53.1 per cent in the previous year, the ratio being 0.04 per mille as against 0.03 per mille in 1922. The mean ratio for the previous 5 years was 0.5 per mille.

The incidence of this disease was greater in the months of August and December than in any other month of the year. The following special steps were taken to prevent any possibilities of spread of infection from the

disease:—

(1) The private medical practitioners in the city were informed through the Press that they might send patients suffering from cholera or smallpox at an early stage to the infectious diseases hospitals at Rayapuram or Krishnampet and attend upon and treat the cases themselves at the said hospitals.

(2) Two Sub Assistant Surgeons in each range were given training in Roger's method of treating cholera cases so that they might treat the cases at the residences of patients, whenever necessary and when there might be a regular out-break.

(3) Pamphlets on "Cholera and Flies" in English and Vernacular were printed and distributed broad-cast to the public.

(4) Posters about cholera were put up at public places.

Incidence:—

1923.	Under 1 year of age.		1 to 4		5 to 9		10 to 14		15 to 19		20 to 29		30 to 39		40 to 49		50 to 59		60 and upwards.		Total.		Total of Males and Females.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Cholera	1	4	2	1	...	1	5	2	...	2	1	2	9	12	21	

Small-pox was prevalent in the city throughout the year in a sporadic form the number of attacks during the year was 481 of which *Small-pox.* 151 or 31·3 per cent. proved fatal. The annual death rate was 0·3 per mille against 21·1 in 1922. The mean ratio for the previous five years was 0·9. Suitable preventive measures were taken and the disease was greatly kept under control.

There were 25 deaths during the year. The annual death-rate was 0·05 *Measles.* per mille against 0·28 per mille in the previous year. The mean ratio for the previous five years was 0·2.

The total number of deaths registered under Influenza was 19 for the *Influenza.* year against 24 in 1922 or 0·09 per cent. to the total deaths, the mean average for the previous five years was 4·1.

There was one attack and one death from an imported *Plague.* case of bubonic Plague against one attack and one death in 1922.

GRAPH SHOWING TOTAL DEATHS BY MONTHS FROM



3778 deaths were recorded during the year from these causes. This represents a death rate of 7·2 per mille against 7·9 per mille in 1922 or 18·9 per cent to the total deaths against 18·5 per cent in 1922. The largest number of deaths were recorded in December, January and February. The mean ratio for the previous 5 years was 9·2. The number of deaths from these causes during the previous 5 years is given below:—

1918—5533	1921—4149
1919—5835	1922—4167
1920—4671	

Diarrhoeal diseases are almost entirely water-borne and a fall in their incidence can only follow in proportion to the improvements that can be effected to purify our water-supply and the control we can exercise upon the sale of articles of food and drink.

3342 deaths were registered from this cause or 481 deaths less than in the previous year. The ratio was 6·3 per mille against 7·3 in 1922 and 6·7 in 1921. The mean ratio for the previous 5 years was 7·6.

General respiratory diseases excluding Tubercle of the lung.

1268 deaths were registered under this head, an increase of 180 deaths to the previous year. The ratio was 2·4 per mille, the average of the previous 5 years being 2·2. Diseases due to infection by Tubercle bacilli appear to be on the increase. The figures available in statistical tables may not represent the whole truth. For, on the one hand in the wide group of Tubercular infections that affecting the lungs is alone made notifiable since 1920, while on the other hand the notifications received do not reveal the exact number actually suffering from Tuberculosis of the lungs. Although it may be argued that the presence of the Tuberculosis Hospital and Institute in the city attracts a good number of cases from the mofussal and, therefore, the rise so far as this city is concerned is only apparent, yet the general consensus of medical opinion seems to agree that the disease is actually on the increase. The remedy is to segregate in the house as best as possible all open cases of lung Tuberculosis *i. e.*, patients who throw out a large number of active bacilli in their sputum and to relieve overcrowding and poverty. What is needed is a general scheme for prevention of Tuberculosis for the whole Presidency if the city should be saved from its ravages.

Tuberculosis including Tubercle of the lung.

2040 or 10·2 per cent to the total deaths were registered under the heading against 2261 or 10·6 per cent in the previous year. Of these, 1440 deaths were recorded among infants under one year of age against 1504 in the previous year who were reported to have died of “convulsions”.

Diseases of the Nervous system.

During the year, there were 62 attacks and 2 deaths from Relapsing fever which was prevalent for about five months from December 1922 amongst the chucklers and scavengers living in old Slaughter House Road, 2nd division, Govindapuram, 17th Division and Krishnam-pet Hutting Ground, 28th Division. The disease was brought under control, each case being immediately removed to the Infectious Diseases Hospitals for treatment after examination of the blood for the presence of spirochaetae and the patient was promptly treated with Neosalvarsan given intravenously. The bodies and clothings of contacts were cleansed and freed from verminous conditions so largely prevalent amongst that class of people.

The number of deaths certified by qualified medical men was 2526 or 12.7 percent of the total number of deaths in the city. Of these, 680 were certified by private medical practitioners and 1846 were certified by public hospitals.

327 applications were received during the year for extracts of entries from the birth registers and 444 from the death registers. Out of these, the number of birth extracts granted was 250 and of death extracts 377. In 101 cases extracts were not granted as the parties failed to pay the fees. In 43 cases entries could not be found and the parties were informed accordingly. The fees collected during the year for such extracts amounted to Rs. 1102-6-0.

Vital statistics are the very foundation of Public Health administration. Any inferences drawn from the statistics are apt to be extremely misleading unless accuracy in birth and death registration and causes of death is ensured. To ensure accuracy of our vital events, the Corporation employs 15 medical practitioners with the qualification of L. M. P. as Medical Registrar Vaccinators and under the standing orders, they have to verify all deaths brought to their notice and registered in their offices with special reference to causes of death by enquiries at the house or of the medical practitioners who attended during the last illness or both.

The correctness of our death returns is maintained on account of various checks instituted at several stages from the moment a person dies till after the remains are disposed of.

1. Every medical practitioner has under the law to report to the Health authorities the occurrence of death under his knowledge within 3 days.
2. Every householder has to register at an office of the Medical Registrar the occurrence of a death again under the law within 36 hours.

3. Reports are received from hospital authorities of deaths occurring in their institutions.
4. The peons stationed at each and every burial ground are required to send daily communications to the Medical Registrar in the form of chits of all dead bodies disposed of at their respective areas.
5. The Sanitary Inspectors make reports of deaths with special reference to causes due to infectious diseases.

In the matter of births, those occurring in Hospitals are reported to the Head office direct by the Hospital authorities. Of births that occur in private residences, a small proportion of them are reported by the medical practitioner or midwife who attended at the time of delivery; and all births delivered by the staff of our Child Welfare scheme and of the Baby Welcomes are promptly reported to us. The difficulty of accurate birth registration is encountered in the case of births in private houses where the above said facilities are not available. These number more than 50 per cent of total births. Under the law every parent or guardian has to report the birth of a child in his house to the Medical Registrar of the division within one week after the day of such birth.

In addition, the Medical Registrar Vaccinator has an assistant for each Municipal division whose duty it is to verify all births in regard to their vaccinal condition and also to trace out births in their out-door rounds and warn people about their obligations towards registering such births. Notwithstanding the said measures to ensure accuracy of registration of births, it is not improbable that a very small proportion of cases may escape detection or report and registration. Instances are not wanting where even educated and enlightened members of society failed to report the occurrence of births in their household purely on grounds of forgetfulness or worry or ignorance of the law. Defaulters can no doubt be prosecuted under the statute but indiscriminate prosecution where they plead no wilful neglect would border on vindictiveness and likely to make our administration odious. We, therefore, resort to the safer and surer method of educating the people about their obligations to the Corporation in these respects. We also send periodically appeals to medical practitioners including hakims and vaidyans in the city requesting them to keep us informed about all vital events, including cases of infectious diseases that come to their notice.

I would take this opportunity of appealing to them once more through this report to evince greater interest in all matters affecting health and well-being of the people of the city and to co-operative with us in our efforts to make it more healthy and prosperous.

The Administration Report of the Port Health Officer.

Incoming-Vessels.—552 vessels arrived here during the year from Plague infected parts with 50,694 crews and 72,574 passengers against 486 vessels with 35,963 crews and 53,865 passengers of the previous year.

Outgoing-Vessels.—236 vessels with 21,700 crews and 22,015 passengers were inspected and granted bills of health during the year against 265 vessels with 28,990 crews and 21,333 passengers of the previous year.

Epidemic and Infectious diseases.—

3 cases of measles with 5 contacts and one case of chicken-pox were found in steamers that entered the harbour during the year under report. All these cases were sent to the Infectious diseases hospital at Royapuram for treatment and observation. The necessary precautions were taken to disinfect the cabins and decks occupied by them.

The disinfection of bedding and clothing of deck passengers and crews landing and embarking from here is continued. The disinfection shed is in charge of a Sub Asst. Surgeon and a nurse is employed for examining female passengers.

Rats on steamers.—No unusual mortality was found on any of the vessels that entered and left the harbour during the year under report.

A Clayton apparatus is maintained in the Port.

VACCINATION.

Till about September 1923, the city was divided into fifteen combined Medical Registration Vaccination districts each under a qualified Sub Assistant Surgeon, designated the Medical Registrar Vaccinator and thereafter the Medical Registration and Vaccination area of each district was revised and 12 districts were formed and each was under a qualified Sub Assistant Surgeon. The object of revision is explained at length on page 4 of this report. Throughout the year there were 2 female vaccinators and 31 assistant vaccinators. The female vaccinators worked in Ghosha and Muhammadan quarters.

Vaccine lymph for the operations was obtained from the King Institute of Preventive Medicine, Gwindy. The total number of vaccinations performed during the year 1923 was 36,629 (22,848 males and 13,781 females) against 51,863 for the previous year. Of this, 17900 cases were primary, and 18,729 were revaccinations against 16,985 and 34,878 respectively in 1922. The number of revaccination cases has perceptibly decreased, consequent on the absence of an epidemic of small-pox, while primary vaccinations have shown a rise and this, in fact, is the real index of vaccination work.

The number of attacks from Small-pox was 481 against 2727 in 1922.

Total cases for the year. Of the total operations performed in the city, 36,118 cases were vaccinated by the Corporation staff and 511 reported by the medical officer in charge of Penitentiary. Of the former number, 17,900 cases were primary vaccinations (16,985 in 1922) and 18,218 were revaccinations as against 33,905 in 1922 and 9,756 in 1921. Of the total number of primary vaccinations 16,559 were performed at the depots and 1,341 outside and of these again, 192 were domiciliary vaccinations performed on payment of fees, the remaining being cases performed in infected localities and in slum areas.

The Council at its adjourned general meeting held on 3rd July 1923 approved of the proposal for the payment of Annas 4/- to every individual who volunteered for revaccination in cherries and hutting grounds in the city. This work was started in the second week of August 1923 and as many as 3,353 persons over 10 years of age were revaccinated up to 31st December 1923 and a sum of Rs. 824—12—0 was paid as reward during the year, the said reward being paid at the time of verification of results.

Reward for revaccination.

The Assistant Health Officers and Medical Registrar Vaccinators verified the results of vaccinations performed by them in 17,476 primary cases of which 16,063 were brought to the depots as required by the bylaw. Occasionally the Health Officer has

Percentage of Success.

himself verified the results of vaccination in several depots. Of 17,476 primary cases verified, 16,865 were successful and 611 unsuccessful, the percentage of success being 96.5 against 96.7 during 1922. This figure includes, as in previous years, persons with one or more scars being taken as having been successfully vaccinated.

The Assistant Health Officers verified 12,620 cases against 10,320 in 1922. The percentage of success in primary vaccinations and revaccinations of all cases verified including those reported by the Government Penitentiary was 96.5 and 36.0 respectively as against 96.7 and 45.3 in 1922.

Of the total number of primary vaccinations (17,900), 15,899 were among children under one year of age against 13,805 in the previous year. The percentage of success in the cases verified was 96.8 against the same percentage in the preceding year. Of 15,899 children vaccinated under one year, 11,568 were born in Madras and 4331 in mofussal. The number of children under one year vaccinated was 30.2 per mille of population against 26.2 in 1922 and the number of them successfully vaccinated per mille was 28.5 as against 24.5 in 1922.

Analysis of successful cases under primary vaccination according to vaccine cicatrices.

Out of 1,865 cases considered as successful under primary vaccination the number of persons who had one or more vaccination cicatrices and their percentage to the total successful cases is furnished in the table below:—

Number of persons who had one vaccination cicatrix.	Number of persons who had two vaccination cicatrices.	Number of persons who had three vaccination cicatrices.	Number of persons who had four or more vaccination cicatrices.	Total Successful.
686	1453	1912	12,814	16865 or 96.5 o/o of the cases verified.
Percentage to total Successful cases 4.1	8.6	11.3	75.9	

From the above it will be seen that in only 75.9 per cent of cases, primary vaccination had resulted in 4 or more cicatrices and these alone can be said to have had good protection lasting for 5 to 7 years and in the others the immunity or protection obtained is in direct proportion to the number of scars.

Percentage to total successful cases.

The total number of births verified during the year was 17,217 against 15,367 in 1922. Of them, 3453 or 20.0 per cent died during the year, 2846 or 16.5 per cent were reported to have been permanently removed out of the city (for 1922 it was 2829) and 344 were not traceable at the addresses given in the birth counterfoils. Of the remaining 10,574, the number vaccinated was 9528 or 55.3 per cent of births verified and 31 cases were found vaccinated elsewhere and 2 cases were found protected by small-pox. Vaccination was postponed in 634 cases against 592 cases in 1922. Of these, 240 were verified by medical practitioners and 205 by medical vaccinators and 189 had temporarily left the city. In the remaining 379 cases which were pending at the end of the year, the parents were warned to have the children vaccinated without delay. From enquiries made to find out the vaccinal history of 1565 children born in the city but removed out of it before being vaccinated, it transpired that only 134 were reported to have been vaccinated outside the city.

Hospital births numbering 5649 were verified during the year. Of these 812 or 14.4 per cent were reported to have died, 903 or 16 per cent were reported to have been permanently removed from the city and 1641 were not traceable at the addresses given in the birth counterfoils, leaving 2293 available for vaccination. Of these, 2040 were vaccinated during the year and 1 case was found vaccinated. Vaccination was postponed on medical certificates in 29 cases, 46 children were found sick by the medical staff and 59 had temporarily left the city. Vaccination was pending in 118 cases. As usual, the number of untraced cases was large in the case of hospital births, which in many instances was due to insufficient and incorrect addresses furnished by the medical officers in charge, the percentage of untraced cases in 1923 being 29.2 against 29.5 in 1922. In the report for the year 1922, the difficulty experienced in tracing out hospital births for purposes of registration and vaccination was explained and the assistance of Government in the matter of issuing necessary instructions to the hospital authorities to render help to us to enable us to trace children born at the hospitals or institutions was sought and yet it is regretted that the conditions which prevailed in 1922 in regard to this matter still continue to exist. It is earnestly hoped that Government will take necessary action in the matter.

The Statement on page 131 furnishes information as to the number of births verified by the Vaccination staff during the year 1923 and the number of children vaccinated before they attained the age of one year.

The following table shows the number of Vaccinations performed by caste.—

Vaccination by caste. The vaccination of Europeans and Anglo-Indians was proportionately larger than that of any other class.

	No. of Vaccinations.	Percentage to Population.
Hindus	28,598	6.7
Mahomedans	2973	5.6
Indian Christians	3140	9.8
Europeans and Anglo-Indians,	1811	15.2
Others	102	5.4

Four hundred and eighty one cases of Smallpox were reported during the year as against 2,727 cases in the previous year. Of these 333 or 69.2 percent of the cases were treated in the two Infectious Diseases Hospitals of which 41 or 12.3 per cent of the cases proved fatal. 215 cases were treated in the Infectious Diseases Hospital Royapuram and 118 in the Isolation Hospital, Krishnampet.

There were 34 cases of prosecution during the year for non-compliance with the bylaws under section 349 (26) of the Madras City Municipal Act IV of 1919. Of these, 11 cases were convicted with a total fine of Rs. 3 and 23 cases were withdrawn as the parents or guardians of children either got them vaccinated or produced certificates from registered medical practitioners recommending postponement of vaccination on grounds of ill-health. It is needless for me to deal with the subject of inadequate punishment awarded by the magistracy in vaccination cases.

In the report for the year 1922 it was stated that the number of certificates received from the registered medical practitioners recommending postponement of vaccination of children on grounds of ill-health swelled from year to year and the increase was evident during 1923. As many as 1272 certificates or nearly three times the number received in 1922 were registered and postponement of vaccination in all the cases was ordered although it was observed from some of the certificates that postponement had been recommended on trivial complaints of bodily ailments for the Municipal by-laws permit the grant of such postponement on the strength of certificates from registered medical practitioners. The parent or guardian is primarily responsible for securing his children an immunity from Smallpox and if he does not mind availing early of the opportunity afforded to him by the Public Health authorities to secure for his children the necessary protection, and tries to evade vaccination under cover of medical certificates for any length of time he has certainly to be more blamed than any body else. Considering the risk involved in subjecting young infants to attacks from Smallpox during the period of such postponements which, in some cases, exceed two years, the parent or guardian would be well advised to get his children or wards vaccinated.

immediately after they attain the age of six months. If he could only bear this in mind he would not only be saving his children from the severity of an attack of Small-pox, but also help the Public Health authorities to keep the disease at bay.

The fees for primary vaccination at private residences under by-law No. 11 of the by-laws under section 349 (26) of the Madras City Municipal Act and for vaccination certificates issued, amounted to Rs. 326 which was credited to the Corporation. The sanction of Government for the amendment of this by-law in regard to the abolition of fees for performing primary vaccination at private residences is awaited. After the amendment is approved by Government, primary vaccination of children will be freely done at their residences by the Corporation staff.

The cost of registration and vaccination during the year was Rs 45,860-13-4. Debiting half of this amount to vaccination, the cost amounted to Rs. 22,930-6-8 and deducting from this amount the fees referred to in the previous paragraph, the expenditure on vaccination was Rs. 22,604-6-8 and the net cost of each successful vaccination was Re. 1-0-6 as against Re. 0-11-2 in the previous year, the increase being due to the smaller number of revaccinations performed than in the last year.

In pursuance of G. O. No. 1, 271 L. Press (L. & M. Department), dated the 22nd December 1920, two batches of first class vaccinator pupils were deputed by the Assistant Director of Public Health, Central Range, Madras for practical training in vaccination work for about 6 weeks. The first batch of 32 students were accorded training in the Corporation depots from 29th January 1923 to 10th March 1923 and the second batch of 30 students underwent training from 19th February 1923 to 31st March 1923. The pupils worked under the immediate supervision of the medical Registrar Vaccinators and all of them were recommended for certificates of efficiency by the two Range Assistant Health Officers.

SANITATION.

The administration of the Sanitary Section of the Health Department was carried on by the Health Officer assisted by the two Assistant Health Officers one in charge of each range. At the commencement of the year there were 15 Sanitary Inspectors-each assisted by a Process Server in charge of the 30 divisions of the city. Divisions 22 & 29 being found too vast an area to be in charge of a single Sanitary Inspector, an additional Sanitary Inspector and Process Server, were sanctioned during the course of the year making up on the whole, 16 Sanitary Inspectors and 16 Process Servers. The peons lent from the Conservancy Section continued to do work in the Sanitary Section.

Water Supply. As a result of discussions in the Council in respect of the quality of water supplied to the city, an Analyst was appointed to examine and report on it. A laboratory was constructed at Kilpauk within the water-works compound to facilitate the examination of samples of water at various stages of its purification. The report of the Analyst in this behalf is appended. This report indicates that the water supplied to the city is far from pure and water after undergoing filtration does not attain to a sufficient standard of purity either chemically or bacteriologically as to make it all wholesome. Unsatisfactory as this may be, the matter is receiving due consideration at the hands of the Corporation. Since my annual Health report for 1922 was written, the Government Water filtration Committee submitted their report to the Corporation who after a discussion at one of their meetings referred the question back to Government for a further report by the said Committee and for obtaining the expert advice of Col. Clemesha I. M. S., (retired). Pending the receipt of these reports, the Corporation have not been in a position to launch upon further schemes for effectively purifying the city water supply. In the meantime the best and safest course for the people to do is to collect the water from the tap after passing it through a thick piece of cloth and boil and cool all that part of it at least which is used for drinking.

Drains. It is the duty of the Health Department to advise the Works Department to construct and maintain drains for the efficient carriage of sewerage and sullage in certain localities where they are likely to improve the sanitary environments. Drains were accordingly constructed in the following areas:—

1. A masonry drain in Madavakkam Road from toll gate southwards.
2. do from Kandapillai Street southwards
3. do Chellappa Mudali St. off Strahans Road. Chulai
4. do Lloyds Road, west of Barbers Bridge Road.

5. Covering drains in Parish Venkatachela Aiyar Street
6. do in Bangaru Naick Street
7. do Chellapillayar Coil Street junction of Pycrofts Road
8. Extending the drain in Malavakkam Road, southwards, from the existing terminal.
9. Constructing open masonry drain in New Street, Nungumbaukkam
10. do in Tholasinga Mudali Fist. Lane.
11. do ditch drain to draw the overflow from Moolakuthalam burial ground and providing culvert across Kathbada Street.
12. do Raising side drains in Mupthar-unisa Begum Street and covering same with reinforced slabs.
13. Raising side wall of drain opposite Law College pumping Station
14. do between Law College Pumping Station and Police Station.

Latrines. The total number of public latrines in the City was 161 of which 54 were of the flush out type, 41 were masonry and the rest 66 were sanded ones. There were also 17 urinals in use during the year. This number however is quite inadequate and more should be constructed in the years to come in addition to converting the present sanded latrines into pukka flush-outs. The urinals recently constructed have not been properly used by the public.

I would recommend that these be reconstructed with two or three seats and flushing arrangements as, in their present condition they really create a nuisance which they are expected to remove. It is a matter for regret however, that even flushout latrines have been found in certain backward localities to be as much of a nuisance as the ordinary sanded latrines consequent on the fact that the people for whose benefit they are made, use them improperly so that the filth instead of falling straight into the trough below sticks to the sides and this necessitates our employing a scavenger to cleanse the latrines daily and frequently. Efforts are made by the Department to educate people in their use and it is proposed to put up in each latrine a notice showing diagrammatically the proper use of this public convenience.

Streets.—Certain important streets and thoroughfares, in the city are now being tarred and a great deal of nuisance from dust is thus abated. There yet are several important and busy localities where nuisance from dust is a real

danger from the Public Health Point of view. It seems necessary to extend the refining of roads so as to make them dustless even at some large initial cost. Dirt and dust are true breeders of disease and they should be allayed by all practicable means.

Building Regulations.—(Sections 230 to 257) As in previous years applications for constructions of buildings were generally dealt with by the Engineering Department, 139 of these were however referred to this Department for scrutiny during the year under report in addition to plans of buildings constructed, wherein defects in regard to sanitation were noticed on house to house inspections by the Sanitary Inspectors.

Control over Waters.—(Sections 262 to 268) Municipal control over tanks and wells cannot at present be said to be satisfactory. It is a well known fact that there are a number of public tanks which are kept in a bad state so as to be a source of nuisance and danger to Public Health. During the year action was taken in respect of 61 cases to get the tank or well cleaned up. But this is very inadequate as there are many large tanks in the city which act as breeding places of mosquitoes. It has been proved that many wells in George Town breed the type of mosquito that carry Malaria to man. Control over waters and water ways in these days is called for mostly for anti-malarial purposes. That Madras is an endemic area for malaria and that there are plenty of breeding grounds for mosquitoes have been amply proved by an investigation consequent on the outbreak of Malaria in an epidemic form in 1912 and 1913. The Corporation started with the assistance of Government a campaign against Malaria which continued to work on actively till April 1921. Since the latter date it was practically given up on financial grounds and except a small set of 9 coolies and a Maistri for cleaning the Anti-Malarial drains the whole establishment was abolished. As at present, before action could be taken under Section 264 regarding these places we have to satisfy ourselves that mosquitoes do breed and that they are carriers of disease. This would require a special staff to investigate from time to time. Anti-malaria work such as oiling and cleaning, removing weeds etc, requires a special set of men trained for the work and the Corporation must maintain a set of these coolies for this purpose. Private tanks, wells and pools are so numerous in the city and so insanitarily kept that some method of controlling them and keeping them sanitary is immediately called for. It is suggested that these places may be licensed by the Department, so that we could have a control over the owners, to make it obligatory on their part to maintain them in good condition and the Corporation could get the necessary work done from time to time by sending out the Special Staff and recovering a fee for the work done. The difficulty is that even if we take action under the Madras Municipal Act owners of tanks and wells &c. cannot find and procure the trained labour for this kind

of work. The Cooum and the Buckingham Canal continued to be in the same condition as recorded in my last report. It is the duty of the Government Public Works Department to remove silt from these from time to time and keep them clean. They require greater attention at their hands than at present. The Corporation cannot at the same time relieve themselves of their responsibility in the matter, as a fair and considerable proportion of sewage is let into these water channels at various points of their course through the city. This can be stopped only when the city is completely sewered.

Abandoned Lands, untrimmed hedges etc.—(Sections 269 to 271) Inspection of these places and prevention of nuisance therein is a part of the routine work of the Sanitary Inspectors. 96 notices were served to rectify the defects.

Insanitary Buildings.—(Sections 272 to 277) House to house inspections were done as usual alongside with detection of concealed infectious diseases. Thorough inspection of 4095 houses were made and 1180 notices were issued to improve them. 10731 houses were also inspected in respect of infectious diseases. Owing to the limited number of sanitary Inspectors and the multifarious nature of their duties, they were not able to do as much work in this direction as we would wish them to.

As a rule many houses are insanitary and congested with numerous tenants. This is an economic problem and until the Corporation comes to the aid of the middle and the lower classes of the people, by expanding the city and helping in the construction of single tenemented model dwellings the congestion is bound to continue. Any action taken by the Health Department in trying to relieve the overcrowding in one corner will only tend to move it on to another.

Cherries and Hutting grounds.—The slums of the City are now receiving better and more constant attention than they did years ago. At the same time, it cannot be said that their condition is satisfactory. Much yet remains to be done. The owners of the cherries and the Corporation will have to come to a definite understanding to make the sanitary environments of their dark spots at least somewhat tolerable. About 120 cherries and hutting grounds existing at present are periodically and frequently inspected by the Health Staff whose efforts at improvements would stop short of sweeping the streets therein, and in the matter of water-supply, drainage, lightning &c. intimation is duly given to departments concerned. But difficulties seem to arise on technical grounds viz., that in as much as most of these are private owned, the Corporation cannot bring about sanitary amenities at the cost of the general tax payer, nor has it been found practicable to make

the owner to carry out necessary sanitary improvements. For one thing the land alone belongs to him, the superstructures being owned by tenants occupying them and for another, the income he derives from the property is quite incommensurate with the cost of improvements asked of him. Moreover under the City Tenants Protection Act the owner is not able to evict the tenants so that he might use the land for other purposes. The result has however been that little or no improvement is possible or permissible. The problem can be solved only in so far as the landlords at least the richer of them are willing to invest capital on these slums and are ready to help their less fortunate brethren to live under conditions of house and environment or a public authority such as the Corporation or the Town Improvement Trust should acquire such black holes in the city and build houses suitable for the class of people concerned. In addition to the above there is an urgent demand for shelters for the large number of beggars straying about in the city. The blind, the deaf and the dumb, mute and the crippled, should be housed and looked after while for those who are free from bodily infirmity there should be small workshops in connection with these poor houses.

Licensable places.—It is always usual that the owner or the occupier of every place used for any purpose specified in Schedule VI of the Act, shall in the first month of every year or in the case of a place to be newly opened before it is opened, apply to the Commissioner for a license for the use of such place for such purpose. Licenses are granted or refused as the case deserves and that no person shall without or otherwise than in conformity with such a license use any place for such a purpose. During the year under report 3481 applications were received in respect of licensable places and industries and factories for disposal of which 204 were refused sanction. These places were frequently inspected and any defects noticed were set right soon. Periodical visits to these were entered in a central register maintained in the office. A statement of licensable places dealt with by the Health Department during 1923 is appended herewith.

Purpose.	No. of applica- tions re ceived	No. Sanc- tioned.	No. refused.	No. Pending.
Aerated water factory	40	31	1	8
Bake Houses	78	55	4	19
Candles	2	1	...	1
Bones	2	1	...	1
Preparing dyes	8	...	...	8
Cartstand	19	12	2	5
Carpets	4	3	...	1
Cattle yards	882	489	51	342
Chemicals	35	21	...	14
Condiments	26	15	...	11
cocoanut fibre	9	5	...	4
Cotton	16	14	1	1
Catgut	1	1	...	...
Fish	17	17	...	...
Fat	3	3	...	...
Tallow	1	...	...	1
Flour	69	49	6	14
Gilding and Electro-plating	65	41	1	23
Hack stable	123	64	6	53
Lac	1	1	...	...
Sowri Hair	17	9	2	6
Hides	1	...	...	1
Horns	5	3	...	2
Indigo Dyeing yard	140	96	2	42
Leather	143	118	2	23
Markets	41	26	...	15
Meat Stalls	104	54	33	17
Oil cloth	23	12	...	11
Fleshing	1	...	...	1
Oil boiling	17	11	2	4
Oil Mill	157	87	21	49
Oil storing	223	186	...	37
Paper	4	...	1	3
Paddy Boiling	443	255	1	187
Rags	1	1	...	...
Pig Sty	2	2	...	...
Wool	2	1	...	1
Soap	18	12	...	6
Skins	21	16	1	4
Spirits	31	13	...	18
Coffee Hotels & Sweetmeat bazaars	276	204	16	56
Turpentine	8	4	...	4
Dairy produce	60	17	3	40
Onions & Garlic	88	62	...	26
Lodging houses	48	13	1	34
Washing soiled clothes	67	39	4	24
Butchers	128	54	...	74
Sugar	11	6	1	4

N.B.--The large number of cases pending disposal is explained thus:—
From January to March 1923, 751 applications were received; out of these 571 were pending on 31-3-23. This was partly due to orders passed by the Commissioner not to issue conditional licenses and partly to sanitary defects not having been attended to before 31st March 1923. From April to December 1923, 2730 applications were received of which 624 were pending on 31st December 1923. Out of these 624 cases, 314 were disposed of before 31-3-24 and in the remaining cases, the applications were pending inspection and report, with the Sanitary Inspectors.

Lodging houses:—(Section 279) 47 applications for running lodging houses were received during the year: The byelaws in this behalf have been revised on a par with those in force in the western countries, and have yet to be passed by the Council. Till then nothing could be done beyond what is being done with them at present as the Section is still not made penal.

Keeping of animals:—(Sections 280 to 286). The provisions of the Act under these Sections were strictly enforced in this direction and strenuous efforts were made to prevent housing of animals along with human habitations.

Lethal Chambers:—Under Section 281 of the Act 6385 dogs and bitches and pups were caught during the year. 449 were claimed back and the rest were destroyed after a detention for three days as usual. The amount spent for feeding them was Rs. 630-3-4 while Rs. 176-13-9 was recovered from the claimants of dogs for reward and feeding charges. The amounts paid by way of rewards to dog catchers were remitted in advance to the Commissioner of Police. Hydro-carbon was the Chemical used for killing dogs but great difficulty was experienced when the supply was stopped by the M & S M Railway Co., In the current year steps are being taken to introduce Carbon Dioxide obtainable locally, but this is more costly than the stuff hitherto used. The Lethal Chambers are accordingly reconstructed so as to suit the introduction of the said gas into the operation room and for killing the animals.

Cattle yards and cow houses:—(Section 282) Out of 943 places that come under the purview of this section, license was refused in the case of 77 yards. In spite of the constant vigilance that is being kept up, the owners of the animals do not yet seem to realise the sanitary importance of providing separate accommodation and entrance for the animals. It has to be admitted that there are yet a large number of them maintained in an insanitary condition and it is no wonder to still find promiscuous living of men and animals in a number of places. Effective steps are, however, being taken to separate human dwellings from cattle yards. On the whole I am glad to state that their condition is much improved than before.

The Corporation continued to maintain the model cow-house containing 60 rooms near the Basin Bridge where as usual a number of milch cattle were permitted to be housed free of cost, only a nominal rent of Re. 0-8-0 per mensem for the use of a room by the shepherd being charged. There were 122 and 182 heads of cattle on 1st. January and 31st December 1923 respectively. A sum of Rs. 367-8-0 including arrears was collected during the year. Provision was made in the Budget of this year for the construction of a model cattle yard in the locality where it was most needed: a site for a cattle yard in Chintadripet was selected and the construction of the building is nearing

completion. It is under contemplation to construct two others in Triplicane and Purasawakam areas in the current year.

It has to be repeated again what was stated in the previous years that the construction of small cattle yards on up to date lines, to accommodate each a hundred head of milch cattle in different parts of the city and at fair proximity to their present habitations is urgently needed to tackle this problem.

Straying of cattle in public streets and thoroughfares, a menace to public health and danger to their safety has yet to receive the adequate attention that it deserves. Unless Municipal cattle pounds referred to in previous reports are started and the sanitary staff invested with necessary powers to carry on this part of work, the existing nuisance is bound to continue. While such nuisance is put down to the desired extent, these institutions are bound to be self supporting and paying concerns to the Corporation in the long run. It is again requested that the question of starting cattle pounds may be considered.

Private stables for horses:—The stables maintained for private use do not seem to have improved to a great extent, owing to the fact that the syces are still allowed to live there alone. My proposal is that the Corporation do close down such stables with a high hand or to force the individual owners to provide for a suitable accommodation to their syces. Drastic steps will of course raise a hue and cry, but yet from a sanitarian's view, the net result has to be achieved either by resorting to law or by educating them to that standard of sanitary living which the syces cannot procure unless they are amply paid. The economic and hygienic points herein need to be tackled at an early date.

Cartstands:—19 applications were received in this behalf of which 2 were refused license. As before the Elephant Gate cart stand was under the supervision of this department, The right of collecting rents and fees from the said cartstand and the bazaars attached thereto was as usual auctioned during the year 1923-24 for Rs. 7050 as against Rs. 8200 for 1922-23. As the contractor defaulted the right for 4 months was resold, for Rs. 2290 with effect from 1st December 1923.

Brick Kilns:—The Government Brick Kiln in Poonamallee High Road has not been shifted outside the Municipal Limits; till then the public in that part of the city are destined to be subjected to the nuisance arising therefrom.

Oil Mills:—The necessity to remove these oil Mills to less congested and non-populous localities in the city is keenly felt than hitherto. The Council will have to tackle this question at as early a date as possible. The proposal for the acquisition and construction of a vegetable market at the site of oil mills in Triplicane was sanctioned by the Council, the cost of the same being met from loan Funds.

Washing and bathing:—(Sections 291 to 293) Besides the swimming bath and the 33 bathing fountains in the city 19 more were constructed during the year in the following places.

1. A bathing fountain in Azeez mulk parachery
2. do. Madavaram Road
3. do. at the Hindu burial ground in
 - (1) in Suryanarayana Chetty Street
 - (2) Oteri and
 - (3) Chulai
4. do. Halls Garden Parachery
5. do. Kutty Parachery, Taylors Road.
6. do. At Lloyds Road junction of Barber's Bridge Road.
7. do. At Narasingapuram.
8. do. Ebrahim Saheb Street, Post Office Street, Coral Merchant Street, North Beach Road, Ammen Coil Street, Arunachela Pandaram Street, Moolakuthalam Paracheri, Adam Saheb Street, and Barber's Bridge Road.
9. do. Venkcatrungan Pillai Street.

These are still insufficient and during the coming years more will be constructed in the needed parts of the city. It may again be stated that supply to all these sources is drawn from the filtered water of the Red Hills. A large quantity of it that is at present utilised in this connection may be conserved for drinking purposes if only public and private tanks in the city are pumped out diverting the water to these needed fountains. While the tanks maintained thus clean will be utilised for bathing purposes without the risk of infection, the other places can also be supplied with the required quantity of water. In the long run this will be economical and beneficial both to the residents of the city of Madras as well as to the Corporation. This is a scheme worth trial from all points of view, and I would only commend to the Council to devise ways and means of carrying out this project at as cheap a rate as possible.

Dhobikhanas.—The two existing Dhobikhanas maintained by the Corporation were insufficient to meet the needs of all washermen in the City. The Government declined to part with the portion of the military land at Perambore Barracks. The insufficient accommodation in the Dhobikhanas is used as a plea by those who wash in any insanitary pond or pool, surface well, and Coom even at the risk of prosecution. More dhobikhanas have hence to be constructed.

Slaughter Houses.—(Sections 294 to 295)—There was only one slaughter house maintained by the Corporation at Perambore where sheep, cattle and pigs are allowed to be slaughtered on payment of a prescribed fee for each animal. The place for slaughtering pigs is separate. The right of collection of rents and fees for the use and occupation of sheep, beef and pig slaughter houses was auctioned for a period of one year from 1st April 1923 for Rs. 51,800 Rs. 22,700 and Rs. 240 respectively. The number of animals slaughtered were 16761 cattle, 383991 sheep and goats, and 1251 pigs. The carcasses were conveyed to the different markets in Corporation meat vans and by baskets. 98974 such carcasses and baskets of meat were removed to the markets in our vans and a sum of Rs. 3,092-15-0 and Rs. 362-12-6 respectively were realised therefor. There were one large and 7 small meat vans in use during the year. In the current year however motor vans have been provided for the purpose.

Incidental sales of the right of removing blood, collections at the piecemeat market, sheep slaughter house and the beef slaughter house, were made during the year.

Licenses to enter the sheep and beef slaughter houses were issued to 1058 persons. Provision was made for constructing sheep pens but as the building was not constructed during the year under report, examination of sheep as to their healthy condition or otherwise before slaughter, was not undertaken.

Slaughter of animals at other places. (Sections 296 to 298) Permission for slaughter of animals was granted free of charge on occasions of religious festivals and ceremonies and the number so slaughtered was 6 cows, 315 sheep and goats. During festive occasions 1343 sheep and goats and 11 pigs were slaughtered at private residences and the amount realised by this means was Rs. 169-4-0.

Milk Trade.—(Section 299) Under this section, falls the licensing of places where Dairy produce is kept and sold as also the milk sellers. 61 such licenses came under this trade. The by-laws have yet to be passed by the Standing Committee and Government. Nor did the Laboratory come into existence.

Markets.—(Sections 300 to 308) The Corporation maintains two public markets both of which are under the control of this Department. In the case of Moore Market excepting the collection of rents, the rest have since come under the Health Department. The collection of rents from the Smithfield Market from 1st April 1923 was sold in auction for Rs. 2,350 as against Rs. 2,500 in the previous year.

Another vegetable market proposed to be constructed by the Corporation has not yet been commenced.

Sale of articles near the markets or the approaches thereto continues to this day and the Standing Committee refused to prohibit certain places for the purpose, but the matter was again referred to the Committee for reconsideration of their decision.

Sale of articles of food.—Prevention of adulteration Act not having come into force yet, no special vigilance could be kept over this. The Sanitary Inspectors carried on this work along with other duties so far as they come across with the unwholesome articles of food and drink. It has to be admitted that this aspect of the food supply question needs to be dealt, with more care and in detail than what is being done at present. To help them in their nature of work, the law, the laboratory and everything connected therewith has to be got ready.

The hawkers of food and drink near open drains, roadsides and elsewhere continue to be a source of grave danger to the health of the city. A proposal was submitted to the Standing Committee to licence all hawkers in the city similarly on the lines of Calcutta Corporation, but unfortunately the Health Standing Committee turned it down. It is being resubmitted to them for reconsideration. A statement of food stuffs destroyed during the year is found in page 35.

Disposal of the dead.—During the year under report, 89 grave diggers or Vettiyaṅs were licensed for the various burning and burial grounds of the City 15137 human dead dead bodies excluding still births were buried and 4796 were burnt. The burning and burial grounds were frequently inspected. 127 permits were granted for erection of tombs over the graves on payment of eight annas a square foot of land and the amount realised thereby was Rs. 773-15-0.

Disinfectants.—Hycol and Chloried powder were the two disinfectants chiefly used during the year.

The Menagerie.—The Zoo in the peoples Park continued to be under the control of the Health Department. A detailed report on its working is embodied in the General Administration report of the Corporation of Madras for 1923-24.

Propaganda work and Exhibition.—Health Propaganda work was started this year, and under the auspices of the National Health week Committee a Health Exhibition was conducted on a large scale, at the Moore Pavilion, Peoples Park during the Pongal week. Besides this at the Park Fair an exhibition of self explanatory charts, pictures, posters, relating to prevention of diseases were put up in a special pavilion kindly placed at our disposal by the South Indian Athletic Association. This attracted a large number of visitors and proved of great educative value. Leaflets and booklets on Infectious diseases and the methods of prevention were distributed to the public on these occasions.

The Medical Officer of the Krishnampet Isolation Hospital and others delivered lantern lectures on Small-Pox and other subjects in the various parts of the city during the course of the year.

A well equipped sanitary Museum in the Ripon Buildings, the appointment of at least two whole time Sub-Asst. Surgeons for propoganda work and the production and exhibition of Cinema films relating to Public Health matters in the various parts of the city among other activities are urgently called for. The Council is being approached regarding the provision of necessary funds for these.

In pursuance of the resolution of the Council at its general meeting held on 20th February 1923, the work of medical inspection of the elementary schools under the Corporation of Madras was entrusted to the medical officers in charge of the 12 Corporation dispensaries.

*Medical Inspector
of Corporation
Schools.*

After the preliminary instructions to the medical officers in regard to the procedure to be adopted for inspections and the procuring of the necessary forms and appliances, the first examination of boys attending the Corporation Schools was commenced during the first week of October 1923, and the medical Officers were directed to complete the first examination of all the boys attending the 38 Schools by the 31st March 1924.

The present arrangement whereby the Sub-Assistant Surgeon in charge of a dispensary has to do medical inspection work of School children in addition has not proved very satisfactory as the inspection very materially conflicts with the hours of attendance and work at the dispensary and if in two or three days in the week which he can set apart for this work, he finds the school is closed, the work of inspection itself is held up and again that full and sufficient attention is not paid towards medical inspection either. Further it has also to be observed that the standard of judgment in regard to the medical examination itself varies in proportion to the number of medical officers employed and consequently, no definite conclusions can be easily arrived at in regard to the diseases etc. prevailing amongst school children. To obviate these difficulties, it has been proposed to entrust this work to two whole time Sub-Assistant Surgeons.

Medical examination of girls has so far been left out and proposals for employing a lady Sub-Assistant Surgeon for the work are under contemplation.

A detailed report on the first medical Examination of boys and Children in Corporation Schools will be found in pages 43 to 60.

Hospitals and Dispensaries.:—Two Infectious Diseases Hospitals one at the Old Jail Road and the other at Krishnampet continued to serve a useful purpose and were in charge of Sub-Asst. Surgeons. The latter has accommodation for 90 beds. The motor ambulance was in use during the greater part of the year. These Hospitals are increasing in popularity. The new Infectious diseases Hospital at Tondiarpet is under construction.

The Dispensaries were in charge of Sub-Asst. Surgeons. Owing to the usefulness of these institutions four more dispensaries were opened during the year at Nungumbukkam, Mannady, Mafuskhan Garden and Mint Street. The proposal that a Municipal dispensary might be made a unit of registration and vaccination district was sanctioned by the Council on 22nd November 1923 and accordingly provision was made in the current budget for three more dispensaries.

These institutions were largely attended by the middle and poor classes of people residing in and about the place where they are located.

A statements of the patients that attended the dispensaries and Hospitals is seen in pages, 33 and 34.

A brief summary of the public health work done during the year by the various institutions & organisations in the city as reported by them referred to in the list attached to G. O. No. 653 P. H. Mis dated 10th June 1921 is furnished as hereunder.

The Madras Society for the protection of children.:—The society received a contribution of Rs. 800 from the Corporation to help them in their cause of rescuing, protecting, educating and bringing up destitute children. The strength of the society stood at 75 as against 74 in 1922. The number of cases rescued during the year was forty five and the number of children in the society's home at the end of the year was 46.

San Thome dispensary.:—This dispensary is a private institution supported by the Corporation and private donations. The number of patients treated during the year was 10,659 with an average daily attendance of 66.45. as against 11333 and 66.81 in the previous year. The Corporation finances to the extent of a monthly grant of Rs. 93-5-4 and an annual grant of Rs. 300/-

Chengalroya Naicker's Orphanage and Dispensary.:—This institution is rendering free medical aid to all classes and castes resorting thereto under the Ayurvedic System. The total number of patients treated was 1,37,868 The Pachiappa's trust board manages the working of the Dispensary with the necessary staff therefor.

Sri Rama Krishna Students Home, Mylapore:—In this institution, 109 poor students receive free boarding & lodging. The Medical ward provided with 12 beds, attached to the Home continued to be maintained as also a dispensary wherein the students of the Home, & also poor people of the surrounding locality were rendered free medical aid. Sanitary & Health lectures were now and then delivered.

Rajah Sir Ramaswamy Mudaliar's Lying-in-Hospital:—The institution is maintained by this Corporation. During the year, 1747 deliveries were recorded in addition to 577 admissions under diseases of pregnancy. 69 cases were admitted through the child welfare scheme. It accommodates 50 beds for Indians and is very popular among the poor and labouring classes residing in this part of the city and besides serves as a training centre for the L. M. P. and Indian midwifery.

The Kalyani Hospital:—36 beds are accommodated in this hospital. This institution is intended for treating diseases pertaining to women as also the midwifery cases. The number of out-patients who attended during the year was 11207 and the inpatients 1068 which is on the increase as compared with that of the last year. The abnormal cases coming under the care of the child welfare scheme in that part of the city are attended to by this hospital when they are taken there.

The depressed classes mission society:—This society has been running day and night schools in Vyasarpady, Domning Kuppam, Vasa mode Mirsahebpeth, Chintadripeth, Kasimodu and other centres for the benefit of the depressed classes. The members of the society visited these schools and cherries and delivered lectures on hygiene, sanitation, cleanliness, cholera, fever, small-pox and other contagious diseases.

The Venkataramana Dispensary, Mylapore:—The number of patients treated for various ailments was 32583 and the total attendance during the year was 78230. The average daily attendance was 214 as against 174 in 1922.

The Madras Social Service League:—Rao Bahadur T. Varadarajulu Naidu Garu with other assistants was carrying on vigorous propaganda work in the several cherries of the city and elsewhere. Medical help to those who need it & Missionary services were rendered by a band of young men. Health lectures formed a redeeming feature of the league.

Government Victoria Hospital for Women:—The work of the hospital has gone on steadily throughout the year. There is again a notable increase in the number of obstetric cases. There were 1175 cases up to November 30th this year as compared with 1065 last year.

Unani Dar-Ush-shifa (Unani Free Dispensary) Triplicane:—The total number of patients treated was 78514 with an average daily attendance of 215·35 as against 145·67 in the last year. The Corporation contributed Rs. 500 The average daily expenditure per patient was 10·34 pies only.

Friend in Need Society:—The society aims at giving temporary help to Europeans and Eurasians who are driven by loss of employment, sickness or other misfortune, such as the provision for old and infirm persons a home for incurables and the setting up in life of young persons without means and the assisting of poor parents with the education of their children.

The Madras Ambulance Corps.—Rao Sahib Dr. U. Rama Rao M. L. C. is the organiser and surgeon of this corps. During the year 540 persons were trained in the art of first aid, 140 in home nursing, and 56 in sanitary course. Several health lectures with the aid of magic lantern slides were delivered. The Corporation contributed Rs. 100 towards its upkeep.

San Thome Orphanage Mylapore.—150 pupils were lodged in the orphanage and those were given the necessary education. Their comforts were looked after properly in the home.

Sri Kanyaka Parameswari Devasthanam Charities Ayurvedic Dispensary.—This institution opened in 1898 serves a real need to the residents of the locality. The system of treatment given here is under Ayurvedic standards. The total number of patients that attended during the year was 59,867 as against 58,624 last year. The average daily attendance during the year was 164 and the expenditure incurred was Rs 4,449-11-1.

Vupputtoor Alwar Chetty Garu's free Ayurvedic Dispensary, Triplicane:—The management of this free ayurvedic dispensary was undertaken by Vupputtoor Alwar Chetti Garu, from November 1923, as the trustees of the CalavalaCannanChetty's Charities who were conducting the dispensary previously under the name of Calavala Cannan Chetti Free Ayurvedic Dispensary, Triplicane had to discontinue on financial grounds.

* The total No. of cases treated during 1923 was 76,337 & the cost incurred, amounted to Rs. 1924-5-6.

The corporation pays an annual contribution of Rs. 100 to this dispensary.

Madras Ayurvedic College and Free dispensary.—In this dispensary which was maintained purely out of subscriptions, 33,922 patients were treated free of cost. The corporation pays an annual grant of Rs. 1,000.

Statement showing the Number of Cases admitted and treated in the dispensaries during 1923.

Names of Dispensaries.	No. of cases treated in 1922.	No. of cases treated in 1923.	No. of cases admitted in 1923.	Minor operations performed.		Average Daily attendance during 1923.	Remarks.
				1922.	1923.		
1. Chinthadripet	42,789	95,518	45,115	1,353	1,516	261.80	
2. Triplicane	24,816	65,034	28,059	1,096	1,072	178.17	
3. Pulianthope	11,543	51,216	26,090	463	567	140.3	
4. Mint Street	...	24,036	7,856	...	98	196.69	Opened on 2-9-1923.
5. Kilpauk	19,972	46,060	21,191	322	374	126.16	33
6. Teynampet	20,973	24,703	10,461	353	361	68	
7. Nungambakkam	...	6,647	2,571	...	16	96.33	Opened on 24-10-1923
8. MafusKhan Garden	...	22,623	8,197	...	66	186.	Opened on 2-9-19232
9. Bauliah Naidu (Vepery)	31,571	76,274	34,014	1,792	1,931	208.96	
10. Mannady	...	12,539	4,727	...	59	119.3	Opened on 12-9-1923
11. Washermanpet	36,031	77,523	35,349	1,584	1,656	212.38	
12. George Town	41,367	1,46,873	49,642	898	846	402.39	705 cases were treated on 16-11-23.

**List of food stuffs destroyed by the sanitary
Inspectors during 1923.**

Mangoes	....	3 baskets and 1588 fruits.
Oranges	...	3 baskets 1038 fruits.
Plantains	...	2537 fruits.
Mutton	....	164½ seers and odd.
Fish	...	13 baskets and odd.
Berry fruits	...	161
Palmyra fruits	....	1 basket and 23
Apples	...	87
Onions	....	25 baskets 24½ Viss 2 trays and odd
Syrup	....	1 bottle.
Custard apple	....	162
Wood apple	....	149
Aerated Water bottles.	...	64
Cocoanut slices	...	1 basket 276
Grapes	....	11 bundles & 9 palams.
Eggs	....	190
Jack fruits	...	2 baskets 1 tray 110 slices.
Melons	...	2 handcart loads 1 tray 35
Goa	...	258,4 baskets.
Biscuits	....	6½ lbs. 24 rolls.
Pumpkins	....	37
Potatoes	....	2 carts 99 bags 24 baskets 4¼ Viss.
Rice	....	96 bags.
Broken Rice	....	906 bags 2 measures.
Bengal Gram	....	83 bags.
Dhall	....	58 bags.
Wheat	....	1 bag,
Sooji	....	10 bags.
Gram	....	40 bags.
Beans	....	1 Bag 3¾ Viss.
Flour	....	67 bags.
Jaggery	....	10½ bags.
Sugar	...	3 bags.
Liq Pancreatias	...	45 bottles.
Milk Tins	...	1723 tins.
,, Bottles	...	205

Lactogen	...	12 tins.
Nestle's cream	...	33 tins.
Nestle's food	...	587 tins.
Chocolates	...	20 Boxes.
	...	231 tins
	...	278 Packets
	...	326 tablets,
	...	104 sticks.
Currants tin and packets.	...	78 tins. and 3 packets,
Preserved food	...	1 case 168 tins 112 boxes
Cocoa	...	100 tins.
Ham	...	10 tins.
Jam	...	36 tins.
Molasses	...	1 Basket.

in addition to a large quantity of varieties of vegetables, confectionary, etc.

Report on the Work in the Corporation Water Analysis Laboratory for 1923.

The Water Analyst, who was appointed in March 1922. as per sanction of the Council, at its meeting held on 15-11-21, was deputed to the King Institute, Guindy, for acquainting himself with the methods of analysis practised there. Meanwhile, a small laboratory, exclusively for water analysis, was built at the Kilpauk Water Works according to the plan of the Director of the King Institute, Guindy. About the end of June 1923, the Laboratory was completed and the Analyst, after fitting it up with the materials, which were originally intended for the Corporation Public Health Laboratory, started his regular work. The work carried out by the Analyst during the year ended 31st March. 1924. is reviewed below in this report.

Staff:—The analyst is helped by an assistant, and two attendants in his work. A watchman has been provided to keep watch over night.

General Arrangements:—Laboratory work as organised at present, is chiefly of a routine nature, and consists of.

(I) Preparing media for bacteriological work, (a list of which is given below.

- | | |
|---|-----------------------|
| (a) Nutrient agar | (b) Nutrient Broth |
| (c) MacConkey's agar | (d) MacConkey's broth |
| (e) Sugar media for water analysis. | |
| (f) Strong Peptone water for cholera work, | |
| (g) Weak Peptone water, | |
| (h) Glucose medium for Voges and Praskaur's Reaction. | |
| (i) Aronson's medium for cholera work.) | |

In addition, sterilisation of pippettes, Bacteriological sample Bottles, Petri Dishes etc.

II Collection of Bacteriological and Chemical samples, three per day and even more occasionally.

III Bacteriological Analysis

- (a) Total colonies count in 1c.c. of sample,
- (b) Inoculation of tubes of MacConkey's bile salt Broth with various quantities of water.
- (c) Vibrio test in 100c.c. of the test tap sample.
- (d) Microscopic Examination of sediments.

(IV) Chemical Examination:—

A. Qualitative consisting of (i) Colour and transparency (ii) Smell (iii) Nitrite (iv) Nitrate. (v) Sulphate, etc.;

B. Quantitative Examination, consisting of

(i) Ammoniacal Nitrogen

(ii) Albuminoid „

(iii) Absorbed oxygen, (Tidy's)

(V) Any other work which the Health Officer or the Special Engineer through the Health Officer may suggest from time to time will be done in the Laboratory.

During the year under review, 1373 samples were analysed, of which 561 were chemical and the remaining bacteriological samples. The number of samples analysed during each month are recorded below.

1923-1924. Month.	Chemical.	Bacteriological	Grand Total.
	Total.	Total.	
June 1923.	—	9	9
July	21	86	107
August	75	77	152
September ...	64	64	128
October ...	64	64	128
November ...	72	72	144
December	47	47	94
January 1924 ...	75	77	152
February ...	71	71	142
March ...	72	85	157
Vibrio tests ...	—	160	160
Totals for 1923-1924.	561	812	1373

Analysis of the raw water show that its organic content as represented by the 'Ammonias' varies considerably. The figures for 'Ammoniacal Nitrogen' and 'Albuminoid Nitrogen' vary between a trace and

0.004 in the former case, and 0.030 to 0.048 in the latter case. The results of bacteriological examination show that lactose fermenters are present in as small a quantity as I.c.c. and upwards in 59 per cent; in 5 c. c. and upwards in 30 per cent; and in 10 c. c. and upwards in 11 per cent of the analyses., the average total number of colonies per c. c. being about 1200.

The filter beds have given varying results. They yield, at times, filtrates of good quality or of fair quality; and at other times, of a quality, which shows no improvement over raw water. The results of filtration as judged by the chemical examination of samples of water are not satisfactory. A smell of sulphuretted Hydrogen was noticed in the regulator chambers of the filter beds, on almost all occasions, the intensity of the smell varying during different seasons of the year. This odour was present through out the year and was more conspicuous in summer than in other seasons of the year. In the case of "Free Ammonia" variations between a trace and 0.019 are to be found. The figures for "Albuminoid Nitrogen" and "Absorbed oxygen" are also excessive.

As regards samples from the test tap on the main, which leads to the city supply, which consists of a mixture of raw and filtered water, there is no definite improvement over raw water. Lactose fermenters are present in I c. c. and upwards in 38 per cent and in 5 c. c. and upwards in 52 per cent and in 10 c. c. and upwards in 10 per cent of the analyses, the average total count per c. c. being 1050.

Vibrio Test.—On 30-8-23, the analyst was asked to make bacteriological tests with special reference to the presence of cholera or cholera-like spirillum in water sent to the town supply," as there were a few cases of sporadic cholera in the town. Samples from the test tap on the main, which leads to the city supply were specially tested for vibrios, and the examination showed negative results. Since then, testing for vibrio in the town supply has become a part of the routine work of the laboratory and on no occasion during the year, under review, the presence of cholera or cholera like vibrios was detected.

Microscopic Examination.—Systematic examination of suspended matter in raw water and of the "filtering skin" or "Schmutzdecke" every time a filter bed was scraped was made under the microscope.

Growths of organisms in the covered-in, masonry conduit.—About the 21st of January 1924, the cleaning of the conduit was started. Till about the 15th

manhole, there was no thick growth of any kind excepting some water insects, which were found adhering to the sides of the wall, above the surface of water. Abundant growths, of a brown colour were seen after the 15th manhole sometimes covering a length of 10 to 15 feet and often in discontinuous patches, whose thickness varied from $\frac{1}{4}$ " to 1". The same growth was found to extend to the Kilpauk end of the conduit. It grew under water, on the sides of the conduit. Samples of the stuff were collected and were identified to be a Polyzoon by Dr. Gravely of the Madras Museum, who sent it to Dr. Anandale the leading specialist in the group, for identification of the species. It was found to be *Plumatella* (*Afrindella*) *tanganyikae*, Rousselet a not uncommon species in India. Imbedded in this, there was also plenty of epistylis. The sample contained in addition plenty of statoblasts of *Plumatella*, *anguillula*, water flies etc. We take this opportunity to offer our sincere thanks to the two Doctors for their help in the identification of the species.

It may not be out of place, here to give an account of the family of Polyzoa.

"The family of Polyzoa is one of the most interesting branches of the animal kingdom. The massy growth consists of branched tubules growing from a common stem in the form of a living tree. Each branch is inhabited by a complete animalcule provided with mouth stomach rudimentary alimentary canal and genital organs. Its prey consists of micro organisms, bacteria, etc., which are swept in to the mouth, by the movements of an array of tentacles which are protruded at intervals in the water. The whole form a colony of individuals housed in the branches of a common zoological tree, which is itself alive. Polyzoa are most fascinating objects to watch under the microscope."

"Winter cold results in the death of the polyzoon moss. Fresh moss grows in the spring from the eggs or statoblasts released from the dead tubules of the zooid."

Miscellaneous work done during the year :—(a) In September, the Special Engineer desired the analyst to make qualitative tests for the smell evolved in the regulator Chambers of the Filter Beds, as in his opinion the odour varied from "earthy" to S.H.₂ smell. Accordingly, several qualitative tests were carried out which conclusively proved that the smell was of sulphuretted Hydrogen. One of the tests was the lead acetate test. Filter papers soaked in an alkaline solution of $\text{Pb. (C}_2\text{H}_3\text{O}_2)_2$ were suspended about a foot over the water in the filter Chambers. They were collected next morning and the results were recorded.

Date	8-9-23	11-9-23	12-9-23	13-9-23	15-9-23	21-9-23
Beds No.	Result of Alkaline lead acetate Paper test.					
1	Black	Black	Black	Black	Black	Black
2	Do	Do	Do	Do	Do	Do
3	Slight change	Do	Do	Do	Do	Do
4	Black	Do	Do	Do	Do	Do
5	Do	Do	Do	Do	Do	Do
6	Do	Do	Do	Do	Do	Do
7	Not working	Not working	Not working	Not working	Not working	Not Working
8	Black	Black	Black	Black	Black	Slightly affected
9	Not working	Not working	Not working	Not working	Not working	Not Working
10	Black	Black	Black	Black	Black	Not working
11	Do					Do
12	Not working	Black	Black	Black	Black	Do
13	Black	Do	Not working	Not working	Not working	Black
14	Do	Not working	Black	Black	Black	Do
W. R.	Inlet	Black	Do	Do	Do	Do
M. R.	Do	Do	Do	Do	Do	Do
E. R.	Do	Do	Do	Do	Do	Do

W. R. = Western Reservoir

M. R. = Middle „

E. R. = Eastern „

In addition, quantitative estimation of the sulphuretted Hydrogen was made, by the "Thio sulphate" method as suggested by Thresh in his book "The Examination of water and water supplies." The results are recorded below.

Date.	Filter Bed No.	Sulphuretted Hydrogen, expressed in Milligrams per litre.
7-9-1923	2	0.402 Milligrams.
„	3	0.188 „
10-9-1923	4	0.542 „
„	5	0.787 „
11-9-1923	6	0.492 „
„	8	0.567 „
12-9-1923	10	0.407 „
„	12	0.639 „
13-9-1923	14	0.346 „
„	1	0.409 „

(b) Experiments on the correct dosage of chlorine, and the minimum period of contact for producing sterility on the effluent from the "Double Filter."

On 22-10-23, the Special Engineer through the Health Officer, desired the analyst to carry out the above experiments. The first portion of the experiments was done according to Sims-woodhead Field test modified by Morrison and the latter portion of the experiments was carried out as follows:—

The dose of chlorine for the effluent from the "Double Filter" was determined by Field test first. Next, six different beakers were taken, each containing 500 c.c. of the effluent; and to each, was added, requisite amount of bleaching powder solution, corresponding to the dose of chlorine, previously determined by "Field Test". After the addition of the Bleaching powder solution, all the beakers were stirred by glass rods, so as to have a homogeneous mixture. The first beaker was allowed 10 minutes contact, next 20 and the last 60 minutes contact. After the end of each period, a set of MacConkey broth tubes were inoculated with water from the respective beakers, and incubated for 48 hours at 42° C. The results, at the end of 48 hours were recorded.

The dose of chlorine for raw water varied from 0.8 to 1.0 part per million, while that of the effluent from the "Double Filter" from 0.7 to 0.8 part per million. The minimum period of contact for producing sterility on 500 c. c. of the effluent from the "Double Filter" was 10 minutes.

Report on the Medical Inspection of the Corporation Elementary Schools.

In pursuance of the resolution of the Council at its general meeting held on 20th February 1923, the work of medical inspection of the Elementary Schools under the Corporation of Madras was entrusted to the Medical Officers in charge of the 12 Corporation dispensaries early in October 1923. In order to obtain the full value of the medical examination, it was considered necessary that such examination should be conducted on identical lines so that the results obtained might be comparable and be capable of being easily tabulated and also serve as a barometer as to the relative conditions—physical, social and mental—of children attending these schools situated in different localities, and to this end preliminary instructions in regard to certain methods of examining children and noting results or opinions formed were given to the Medical Inspectors (Sub-Asst. Surgeons in charge of Corporation dispensaries). Between the date of resolution of the Council referred to above and the date of actual commencement of work in October 1923, the necessary printed forms and registers and appliances, such as portable weighing machines, and Snellen's cards etc. were got ready. The Assistant Health Officers were placed in immediate charge to inspect and check the work of the Medical Inspectors in their respective ranges.

Method of Examination.—Medical inspection of children was done only during school hours for two reasons, firstly, to enable Sub-Asst. Surgeons to attend to this work without clashing with their routine work in the dispensary and secondly, to avoid pupils being overtaxed by having had to attend schools at all times of the day. Also the children had to be examined without causing any inconvenience to the regular working hours of all classes. In fact systematic medical inspection cannot be undertaken sufficiently on a part time basis by private medical practitioners or those employed on other work, for it must be done during school hours, on school premises and with the necessary assistance of school teachers and in association with the school curriculum. In short, medical care of children should be organised as an integral part of the educational system. Medical examination was commenced by taking up children from the lowest standard and working upwards to the highest in each school. The parents and guardians of boys were invited to be present at the time of medical examination by means of a printed post card—*Vide* form A on page 58—delivered at their houses by the school peon. A record of personal history and social and

economic conditions of parent or guardian, home condition and environments and medical history--all these in the form of a register--was maintained for each boy--*Vide* form B on page 59. On the next day after examination, the Headmaster was instructed by the Medical Inspector to fill up a report--*Vide* Form C on page 60--copying therein the complaint and treatment suggested and to forward the same to the parent or guardian for necessary action.

Number of boys examined.—The first medical examination of all the boys that attended the 38 Corporation Schools was completed in about six months ending March 1924. In all, 5,670 boys were examined and the girls were left out, as we had no Lady Doctors deputed for this work. It was also considered expedient not to include the girls in the examination for the possible likelihood of the parents of the girls raising some objection. Proposals for examining the girl pupils also by qualified Lady Medical Practitioners are under consideration.

Futility of employing different Medical Officers to inspect children in different Schools.—Notwithstanding the preliminary instructions issued to the medical officers for the examination of pupils on identical lines, it is observed from the reports received from the Medical Inspectors that some have done the work in a merely superficial manner while others have done their best. Defects of children both physical and mental and of the extent to which such defects exist as disclosed by the examinations, have, for obvious reasons, varied widely, such variations depending more or less on the personnel of Medical Inspectors. In my note dated 28-7-1922 for the staff required for the medical inspection of schools, I explained at length the futility and impracticability of employing different people to inspect children in different schools and at different times, as such a measure would only give rise to the establishment of varying standards and inconsistent data which it would be hard to collate and study; and I, therefore, suggested then for the consideration of the Health Committee and the Council the necessity for employing a duly qualified medical man, not below the grade of a licentiate or graduate in medicine of a recognised University for this work. But, unfortunately, the suggestion did not meet with the approval of the authorities and the Medical Officers in charge of Corporation dispensaries were deputed, as already stated, for the medical inspection of school children with the result that from the findings of the medical examination, it seems not possible to draw out useful conclusions. The figures furnished in the returns vary widely, from school to school, although they are situated in one and the same locality. Hence the information collected and tabulated for several schools is consolidated all in one form and worked out as averages on each count with a view to form opinions and offer comments on those data as far as possible.

Results of Medical Examination.—The results of medical examination of 5,670 boys who attended the 38 Corporation schools during the year 1923-24 are furnished below. In all the cases where minor ailments were noticed, the boys were advised to receive treatment at the nearest Corporation Dispensary and where serious defects were found out, the parents were advised to get their boys treated in special hospitals.

In the year 1916, at the instance of the Government, Lt. Col. Donovan I.M.S. with his assistant conducted the medical examination of 1,201 boys in eleven of the Corporation Schools. Statistics as to his findings of the examination embodied in G. O. No. 945, Home (Education), dated 7th September 1916 are furnished separately.

Comment on the results.—The most striking fact that emerges from the examination is the prevalence of infectious or contagious diseases including skin affections and of Tuberculosis, viz., 2.01 per cent and 0.32 per cent respectively of the boys examined. These diseases were, largely, prevalent in the schools at Anna Pillai Street, Cemetery Road, Alwarpet and Vasapmodu. What need to be done in regard to these children are these:—

(a) Absolute exclusion of those suffering from such diseases as leprosy and infectious or contagious disease, especially of skin and of open Tuberculosis i.e. cases in which sputum infected with Tubercle bacilli is expectorated.

(b) Advice to parents for treatment of such cases either in hospitals or elsewhere.

(c) Examination of all children before admission to schools by the Medical Inspectors.

Infectious Diseases.—To carry out suggestion (a) it is necessary to obtain legislation from Government and to follow it up by providing open-air-schools for Tuberculous children. It is a matter for serious consideration whether public opinion is now ripe for enforcing compulsory attendance at such schools. The best solution would be in the absence of 'special' open-air-schools to make existing schools or those to be built hereafter as much open to fresh air and full sunshine as possible. To refuse education to such children would be a real hardship considering the fact that, in many cases, infants and children can resist and sufficiently react to such infections as to be completely cured of them.

Suggestions (b) and (c) can be easily carried out by us by rendering the medical assistance through our own dispensaries and by getting the assistance and co-operation of Government institutions.

Cleanliness and conditions of skin, head etc.—Amongst the more common diseases of boys, those affecting the head, body etc. were the foremost, chiefly due to uncleanly habits. 3,673 or 65.09 per cent of boys were found to be either

uncleanly, or to harbour head lice (pediculi) or to possess dirty long nails, matted hair, muddy clothing &c.; especially the boys in Corporation Schools at Annapillai Street, Cemetery Road, Vasapmodu, Salai Vinayagar Koil Street, Teynampet and Thousands Lights had one or other of the defects. It is most important to develop cleanly habits in school children. The hair, face and hands should always be clean and the nails kept short. The teachers themselves should set an example by strenuously inculcating principles of cleanliness to the boys. On the part of the Corporation it is necessary to provide for the children in connection with each school a place or places for bathing with sufficient number of towels, soap etc. The Headmaster should be held responsible that all the children have a bath or two at the school under the supervision of respective class teachers every week. I would suggest the construction of suitable baths similar to the one in Peoples Park specially for use by school children. All the children of one class should be led to those places once a week in rotation where they can have a hearty wash and enjoy an afternoon. Head lice must be removed by an application of turpentine to the head or some form of ointment innocuous to the child but capable of killing the louse and its eggs, and followed by a hot water bath with soap or soapnut powder. The clothing of school children was dirty, as a rule, and of very meagre character insufficient to protect children from the vicissitudes of weather during the different seasons of the year. Cleanliness of boys' clothing can be ensured if parents bestow a little attention on this matter. The poverty of parents might not permit the majority of boys to have sufficient number of dhoties etc. to admit of their daily wash. In really deserving cases dirty clothes may have to be got washed at public expense. It would be a wholesome practice if during the weekly baths, children are also taught to wash their own clothing. While at schools pupils should be awarded marks by opening a special column in the registers for cleanliness and a prize or prizes awarded for those who wear clean clothing and appear daily in a neat and tidy manner. If prizes should be given for the best boys for proficiency in study, there is no reason why they should not be given prizes for cleanliness. The boys in the lower classes must be given lessons in bathing, cleaning of teeth, wearing of neat and clean clothing etc. It will be of immense benefit to the boys if lantern lectures on these headings are arranged and actual demonstrations held at every school with illustrations and necessary instructions in the vernacular.

Malnutrition.—744 boys or 13.1 per cent of the boys examined were classified under malnutrition. Children, as a rule, require relatively or proportionately to the age and size, more food than adults, because the food has not only to make up for the nutrition of the body but also for growth. Good nurture promotes growth and hence the height and weight are indications of nutrition. The anthropometrical data compiled on the examination of height and weight of

5,670 boys of the Corporation schools is furnished below along with the anthropometrical observations of the Anthropometrical Committee of the British Association so that a comparative idea of the growth of boys in Great Britain and in Madras may be had. This statement furnishes, as in a mirror, the image of poverty, insufficient food and clothing, of school children in Madras. The Corporation schools at Anna Pillai Street, Vasapmode, Cemetery Road and Chintadripet were the worst that suffered from malnutrition, the percentage of boys that suffered being 57.6, 50.0, 48.82, 44.4, respectively. 62.3 per cent of boys attending Corporation Schools belong to the poorer class and could not, therefore, afford to have sufficient food for the day. Since 2nd June 1924 the Corporation of Madras has been providing a midday meal at its own cost for the poor boys attending the schools under its management at Chetput, Thousandlights, Obra-palayam, Cochrane Basin Road and Mirsahibpet, all situated in paracherries and poor localities. This beneficent measure is certainly laudable and its extension to needy children in other schools is earnestly wished for.

Anthropometrical measurements of Corporation School boys compared with those of the Anthropometrical Committee of the British Association.

Age.	Average weight in pounds.			Average height in inches.		
	Anthropometrical Committee of the British Association.	Corporation Schools.	Decrease.	Anthropometrical Committee of the British Association.	Corporation Schools.	Decrease.
	Boys.	Boys.		Boys.	Boys.	
4	...	33.23	...	...	39.49	..
5	39.90	34.06	5.84	41.03	40.29	0.74
6	44.40	36.19	8.21	44.00	41.51	2.49
7	49.70	39.34	10.36	45.97	43.51	2.46
8	54.90	42.22	12.68	47.05	45.62	1.43
9	60.40	45.54	14.86	49.70	47.40	2.30
10	67.50	48.92	18.58	51.84	48.83	3.01
11	72.00	51.46	20.54	53.50	50.07	3.43
12	76.70	55.17	21.53	54.99	51.65	3.34
13	82.60	55.68	26.92	56.91	52.78	4.13
14	92.00	61.97	30.03	59.33	54.55	4.78
15	102.70	72.25	30.45	62.24	57.87	4.37
16	119.00	84.90	34.10	64.31	59.53	4.78

Teeth and Mouth.—1,556 boys or 27·4 per cent of the boys examined were found to have bad teeth and mouth. The schools at Purasawalkam and Choolai were almost free from these diseases while the schools at Periamet, Goyathope, Obrapalayam, and Chetput suffered the most. The diseases arising from bad teeth are several. The preservation of the teeth is therefore most important and the conservative treatment should commence at the age of 7 or 8 or thereabouts when permanent teeth begin to replace the temporary ones (milk teeth). Modern medicine lays such great stress upon the cleanliness of teeth and mouth that certain Physicians of great repute attribute any human ailment to pus in gums (Pyorrhoea Alveolaris), tartar on teeth, caries of tooth or teeth, ill-set or badly growing and to foul smell from the mouth. Dentistry is a special branch of medicine and the ordinary physician may not be competent to treat cases of defective teeth and gums beyond pulling out a shaky tooth or opening a gum boil. In course of time, the Corporation may have to employ a dentist to attend to the teeth of all children attending their schools and correct in time defects noticed. But, luckily enough dental diseases and defects are not so common a feature in this country as in England. Very early in their life children in this country are habituated to eat rice and fibrous vegetables and roots and various hard and crisp articles of food which they are obliged to chew and bite properly before swallowing. Immediately what is needed is disciplining children to keep their teeth and mouth clean. Every child must as soon as possible after admission, be given a small leaflet indicating briefly the practice to be observed daily towards this end.

(1) The first thing to be done for the child as soon as possible after getting out of bed is to lead him to the household bath room where he should be given some innocuous powder with or without some carminative ingredient with which he should rub his teeth for 3 to 5 minutes and rinse his mouth freely with water. A suitable tooth powder may be made thus and it is almost inexpensive and easily made in any house-hold. The dried shells of cocoanut are put in a fire place and set fire and as soon as the flames subside but the fire is still on, that is the shells are completely charred, pour water and quench the fire. Powder this fine and mix along with it some clove, pepper and camphor. Those who afford can buy any patent tooth powder and tooth pastes. Yet another prescription is to powder fine chalk and add equal quantity of heavy magnesia powder and mix thereafter a few drops of eucalyptus oil or carbolic acid.

(2) After each occasion that the child eats or drinks any fluid other than water, the teeth must be rubbed and mouth rinsed with water. Children who appear at school with dirty or unclean teeth should lose some marks for each day of default.

Nose and throat.—1,367 boys or 24.11 per cent of the boys examined were suffering from either of these causes—defective sense of smell, adenoids with consequent mouth breathing, enlarged tonsils, cervical or submaxillary glands etc. The unhealthy, ill-ventilated and evil-smelling state of the dwellings and surroundings of the poor children might be the reason for the diseases referred to. What is needed is the improvement of the sanitary environment of these children coupled with measures intended to abate nuisance from smoke, dust and bad effluvia. Diseases of the throat are not to be overlooked in the young child, since, a condition such as adenoids in a child, mars the future of the particular one unless promptly and effectively removed. A large number of children are dull and backward and apathetic in their class work and studies, while at the same time they exhibit a very poor development of their bodies, all on account of adenoids. The diseases pertaining to these organs were very largely noticed in the Corporation Schools at Nungambakkam, Chetput, Otrapalayam and Anna Pillai Street, while the schools at Kosapet, Kalmanthapam, Kasimode, Angappa Naick Street and Alwarpet were the least affected.

Myopia and Eye diseases.—332 boys or 5.9 per cent of the boys had short-sight and 162 or 2.9 per cent had granular lids or other affections. These require special treatment at an eye-hospital, except in the matter of sore eyes or ophthalmia. Deserving cases were advised to be taken to the Government Eye Hospital. A greater percentage of children were found to be suffering from myopia in the schools at Chintadripet, Bells Road and Nungambakkam than in other schools and the schools at Nochikuppam, Bazaar Road, Mylapore, Sanjeevrayanpet, Angappa Naick Street were free from the disease.

Ear Diseases and hearing.—569 boys or 10.03 per cent of boys examined were suffering from ear diseases and 23 boys or 0.41 per cent were found short of hearing. Early diagnosis and treatment of defects of sight and hearing of boys should receive the attention of parents as otherwise, the disabilities in after life would be serious. The boys in the Corporation schools at Bells Road, Chintadripet and Goyathope and Periamet were the worst sufferers from these diseases.

Other diseases.—As regards other diseases it is hoped that parents of children would take early steps to remedy the defects pointed out to them by the Medical Inspectors.

In regard to the utility of medical examination of boys the following is quoted from “Hygiene and Public Health” by Doctors Farkes and Kenwood: “To whatever extent Medical Inspection may lead to the detection and alleviation of physical defects in school children, to a corresponding extent will children gain in general health and development; better results will be obtained from the

teaching at school ; the more healthy and physically fit child will be less a drag upon the resources of the family and the State and posterity will benefit from a healthier stock."

The education of boys in the ways of their daily routine and the co-operation of parents will tend to raise the health conditions of the children to a higher level. To this end propaganda work must be done by the teachers with the aid of magic lantern slides.

Sanitary condition of Schools.—A summary of the report of the medical Inspectors on the defects noted in regard to the sanitary condition of Corporation Schools is appended to this report. The defects noticed are briefly enumerated below:—

(1) The use of unfiltered water for drinking purposes in all the schools and location of water taps very near the latrines in the schools at Chintadripet, Goyathope, Periamet and Kassimodu and the need for the provision of pipe water in the schools at Nochikuppam and Alwarpet.

(2) The absense of play ground for schools at Bazaar Road, Mylapore, Teynampet, Cochrane Basin Road, Kassimodu and Anna Pillai Street and the insufficiency of site used as play ground in the schools at Periamet, Purasawalkam, Korukupet, Cemetery Road, Salai Vinayagar Koil Street and Vasapmodu.

(3) The insanitary condition of the surroundings of the schools at Venkatarangam Pillai Street, Royapettah, Vallabha Agraharam, Cochrane Basin Road, Edapalayam, Angappa Naick Street, Cemetery Road, Anna Pillai Street and Vasapmodu.

(4) The need for annual and special repairs to school buildings at Bells Road, Triplicane High Road, Royapettah, Mandavalli, Alwarpet, Egmore, Sanjeevarayenpet and Korukupet.

(5) The unsuitability of houses now occupied by the Corporation schools at Jani Jehan Khan Road, Bazaar Road, Mylapore, Teynampet—all in rented buildings—for purposes of schools.

(6) The want of compound walls for schools at Thiruvotbiyur High Road, Kosapet, Konditope and Anna Pillai Street and the consequent insanitary condition of the surroundings of the schools.

(7) The absence of latrines for schools at Nochikuppam and Cochrane Basin Road and the need for improving the existing latrines attached to the schools at Vallabha Agraharam, Triplicane High Road, Bazaar Road, Mylapore, Teynampet, Thousandlights, Obrapalayam, Chetput and Kosapet.

(8) The disturbance to the working of the schools at Sanjeevarayenpet, Cemetery Road and Vasapmodu by the presence of mills and manufactories in the vicinity.

General remarks.—The school premises should furnish the best possible hygienic environment for the boys and should present an object lesson of cleanliness, brightness, good taste and of scrupulous regard for all sanitary demands. The schools have been put in places where they would attract the surrounding children to school, and, naturally, to some extent the sanitary needs of a school are not complied with, but it should be our ideal to secure the best sanitary conditions under the circumstances. To achieve this ideal, both our energy and resources should be diverted and the sooner they are done the better. The supply of a Berkefeld filter to each school is recommended and it is hoped that the defects pointed out would receive the immediate attention of all concerned.

Co-operation by Teachers and Parents.—The fundamental objects of the school medical service are threefold, namely, (1) the inspection and supervision not only of children known or suspected to be weakly or diseased, but of all children attending school, (2) the early detection of incipient malady and prompt treatment of existing disease, and (3) providing the parents and the educational authorities with facts in regard to the physical and mental development of children during life. The child is medically examined and if found defective is referred for treatment but for continuity of work and for attaining the end in view *i.e.*, the raising of a healthy population, should be “followed up” and subsequently re-inspected. The medical inspection is intended to serve two purposes, firstly, to enable the child to reap the benefits to the fullest advantage of the education imparted, by discovering physical defects, disabilities and to prevent or remedy them and secondly, to rear a healthy population, it having become more and more evident that a close and vital relation exists between the physical condition of the child and the health and capacity of the whole population.

Food, fresh air, exercise, warmth, cleanliness, rest and regular habits of life—these seven are essential to a child's well-being. Given these things the child is bound to grow and lay up for itself in years to come a sound and resistant constitution. Obviously, the home is the true place of nurture and for the provision of these things in infancy. The home conditions and the home training should always be kept in view and any system of school medical inspection should be so organised as to influence them for the better. There are three essential parts of any national system of preventive school hygiene. The first necessity is information and instruction, a body of knowledge, the second is a favourable environment and the third requirement is an habitual and daily practice.

Obviously then the efficiency or lack of efficiency of the medical work in the schools depends very largely on the interest taken in the work by parents and teachers. The Medical Inspector can diagnose defects, explain their import and suggest remedies but the carrying out of advice given is largely in the hands of the parent and the parent can be influenced by the teacher. "It is largely owing to the interest taken by the teachers in the health of the children under their care"-writes Dr. Herdman "and the trouble they take in following up the work of medical inspection that the large proportion of children obtained treatment for their defects, for a teacher who has lived for years in a village, and knows all the parents has very great powers in persuading them to have their children's defects remedied." Dr. Kaye writes, "The Head Teacher's interest is the cardinal necessity of successful work. If the Head Teacher identifies himself with the aim of school medical inspection its success is assured. On the other hand, if his interest is lukewarm or non-existent, school inspection is not half as successful as it might be. In the former case the cards are well prepared, the parents invited, the special cases selected with care, the inspection is *felt* to be successful, the actual work is more enjoyable to help and the teacher being interested in the results is able to help the parents considerably." So that at the inspection any defect found is explained to the parent present and the treatment advised. The importance is impressed upon the parents of treatment in apparently trivial ailments which may otherwise prove to be the beginnings of more serious disease.

K Raghavendra Rao, B.A., M.B., & C. M. (Mad.),

Dated, 11-6-1924.

D. P. H. (Camb), Health Officer.

Summary of the report of the Medical Inspectors on the defects noted in regard to the sanitary condition of Corporation Schools.

1. *Bells Road School*.—There is a stable on the western side of the compound wall. It should be removed. Accommodation is poor for the strength of the school. Annual repairs such as white-washing and painting etc. should be attended to. The thatched shed is leaky during rains and the floor is not sufficiently high. Children drink water directly from the tap.

2. *Chintadripet School*.—This school is in close proximity to a cart-stand. The drain passing through the school compound should be covered up. Annual repairs to the school are necessary. Children drink water directly from the tap which is close to the latrine. The tap should be removed to some other place.

3. *Venkatrangam Pillai Street School*.—Surroundings of this school are insanitary. There is a cowshed in front of the school which should be removed. The air around is rendered foul by the condition of the Kuppam with open drains, latrines, cesspools etc. The classroom of the 1st standard is overcrowded. No provision is made for filtering the drinking water. The desks provided

for 1st standard boys are so low that the boys almost bend double while writing. This is detrimental to the growth of boys. The boys may as well be instructed to stand up face to face while writing.

4. *Vallabha Agraharam School*.—The open space in front of the school is used as a public latrine by the residents of this locality and thereby the atmosphere of the school is contaminated. The classroom of the 1st standard is overcrowded. The drainage of the latrine needs over-hauling. No provision is made for filtering the drinking water.

5. *Triplicane High Road School*.—The classroom of the 1st standard is overcrowded. The sanitary condition of the latrine attached to this school is very bad and the latrine is too small for the strength of boys in the school. The drainage of the latrine is also bad. Annual repairs to the school are necessary. Filter system should be introduced for drinking water.

6. *Mirsaibpet School*.—The accommodation for the school is not sufficient. There is no garden attached to the school. One additional water-tap may be provided for the school either on the southern or western side of the building. Filtered water should be used for drinking.

7. *Royapettah School*.—The collection of night soil just in front of this school is highly objectionable. Ventilation is poor in one of the rooms, consequent on the erection of the thatched shed. It is better that the thatched shed is erected on a cement paved platform. The eastern side of the main building is cracked and the foundation of the building has gone down. Early action should be taken in regard to these. Boys drink water directly from the tap; arrangements for the supply of filtered water should be made.

8. *Jani Jhan Khan Road School*.—The school is located in a rented building and it is quite unsuited for a school from all sanitary considerations. Arrangements for the supply of filtered water should be made.

9. *Mandaravalli School*.—This building requires whitewashing. Water is drunk directly from the tap. Articles of furniture are broken and are in a dangerous condition.

10. *Nochikuppam School*.—The school is situated in a hut with no flooring. There is a big manhole close to the school and hence there is bad smell. There is no latrine nor a tap for the school; no provision is made for drinking water except from the tap.

11. *Bazaar Road School, Mylapore*.—This school is located in a rented building. Ventilation is poor, flooring is bad and latrine insufficient. Bad smell emanates from the latrine and drain. There is no playground; no provision is made for drinking water except from the tap.

12. *Teynampei School*.—Ventilation and lighting are very poor. This is not a suitable building for a school. One of the latrines has no paved flooring. There is no play ground for the school and there is no arrangement for filtering water for drinking purposes. The sanitary condition of the school is far from satisfactory. Some other suitable building may be selected early. The pandal put up over the terrace of the school building requires over-hauling.

13. *Alwarpet School*.—There are cultivated fields on 4 sides of this school close by. The building requires annual repairs. There is not even a single water tap in the school. Well water is used for drinking purposes. Furniture is insufficient and boys are made to sit on the floor of the verandah for want of benches. Steps should be taken to close the well and to provide water taps as early as possible.

14. *Thousandlights School*.—The ground floor of the latrines is on a low level and water stagnates during rainy season around the latrines. Provision for the supply of filtered water should be made.

15. *Nungambakkam School*.—Water is drunk direct from the tap. The latrines are very dirty and they require more cleaning and flushing out with water all round.

16. *Obrapalayam School*.—Latrine is insufficient. Water is drunk direct from the tap.

17. *Chetpet School*.—Manual training class-room requires improvement. Windows may be placed on the western wall and glass windows in the northern wall may also be provided. The latrine is a sanded-one and frequent removal of soiled earth and fresh supply of sand are required.

18. *Egmore School*.—The school is located in a rented building. There is a drain north of the building. It is not well constructed. The drain water soaks into the earth and breeds mosquitoes. There is a pond in the north-west which also breeds mosquitoes during rainy season and this should be filled up. The latrine is not well flushed out and water soaks there. It is awfully stinking. There is one common latrine for both boys and girls and this is objectionable. One more latrine should be constructed. The building should be thoroughly white-washed. Boys drink unfiltered water.

19. *Goyathope School*.—One of the latrines is in a very bad condition, the walls of which are cracked and are likely to collapse at any time. This requires immediate attention. The water tap is at present situated near the latrine. Another tap near the eastern side may be located. Provision should be made for the supply of filtered water for drinking purposes.

20. *Periamet School*.—The latrines are situated very near the class room and their location is objectionable. Teachers should have separate latrine. The latrines are of the pattern of house latrines. Play ground is quite inadequate. The building requires thorough whitewashing. The water tap is near the latrine and it is likely that water may be contaminated. It should be removed to some other place. Provision should be made for the supply of filtered water.

21. *Purasawalkam School*.—The play ground is small. No arrangement is made for drinking water.

22. *Choolai School*.—The latrines are of house pattern. No arrangement is made for the supply of filtered water.

23. *Strahans Road School*.—No special arrangement is made for drinking water.

24. *Sanjeevarayanpet School*.—On the western side of the school is a cowshed which causes nuisance to the school and on the northern side of the building the weavers are causing loud noise by their weaving mechanisms. The school building requires white-washing. No special arrangement is made for drinking water. A gate at the western compound wall of the school is badly needed as the majority of the boys come from that direction.

25. *Korukupet School*.—This school requires whitewashing and sundry repairs. The boys are utilising the small strip of ground all round the building for games. There is no playground for the school. No arrangement is made for the supply of filtered water for drinking.

26. *Thiruvotthiyur High Road School*.—The latrines are of ordinary type similar to those used in houses. This school has an extensive playground on all sides which is quite insanitary as people commit nuisance during nights. A compound wall is urgently needed. No arrangement is made for the supply of filtered water for drinking. A water tap for each latrine is necessary.

27. *Kosapet School*.—There is a cowshed at the northern end of the building. An open drain runs round the building on three sides. At the northern end there is a tank. The school has latrines without any provision for water. The play ground is not quite sanitary as an open drain runs around it and the ground has to be sanded. There is no water tap in the school. The latrine requires doors, roof and water taps. The main building requires at least one water tap for purposes of drinking. The class rooms are very hot and sun-shades for the windows are very urgently required. A compound wall is necessary.

28. *Cochrane Basin Road School*.—There is one public latrine about 30 yards to the south of this school. To the south-east of the school there is also another latrine about 60 yards off and 15 yards off to the south-west of the school.

there is the drain water junction of which a portion is uncovered. There is no play ground nor latrine for the school. No water filters are used for drinking purpose. Some petty repairs are required for the building.

29. *Edapulayam School*.—There are two cowsheds to the south of this building. The boys drink water direct from the tap which is put up near the latrine.

30. *Malayappen Street School*.—No water filters are used for drinking purposes.

31. *Konditope School*.—There is an iron foundry about 15 yards to the west of this school and much noise is always caused by its working. There is no compound wall for this school. Boys drink water direct from the tap.

32. *Kalmantapam School*.—There is one tap outside the school building which serves the school and other people in the street. Children drink water direct from the tap.

33. *Kassimotu School*.—There is no playground attached to this school. A tap near the latrine serves water for drinking purposes.

34. *Angappa Naick Street School*.—There is a closed burial ground on the north of the school and on the south there is a high-walled house.

35. *Cemetery Road School*.—About 20 yards to the east of the school compound there is a public latrine. Vratties are prepared on the open ground adjoining the school on the north and they give an offensive smell throughout the day. There is a cemetery in front of the school. On the west, there is a blacksmith's factory which is a source of nuisance and disturbance to the working of the school. The playground for this school is quite insufficient. There are no utensils for filtering water required for drinking.

36. *Salai Vinayagar Koil Street School*.—There is an open drain in front of the school. The lane to east of the school, is in a filthy condition. There is a very small playground quite insufficient for the school. No arrangements are made to secure filtered water for drinking purposes.

37. *Anna Pillai Street School*.—This school is situated in a filthy locality. There is no compound wall for the school. Much nuisance is caused very near the school building by the people in the adjoining house and it is necessary that a compound wall is constructed early. Some of the windows are always shut to prevent the foul air from outside.

The windows are too small to admit air. The heat is unbearable here during summer. The verandah in which a class is held is exposed to the direct rays of the sun in the afternoons. No class should be held there unless thatties

are provided to keep off the sun. The latrines are quite close to the school and have no roofing and it is quite impossible for the boys to go there in the midday as the floor becomes too hot. There is no play ground for the school. Water for drinking is not filtered. The sanitary condition of the school is not satisfactory. The school building is not suitable for a school unless some alterations are made.

38. *Vasapmode School*.—There is pumping ground very near the school and within 30 yards of the school there is a public latrine. The open drain in front of the school gate is closed except in one or two places. There is an iron foundry near the school and the noise created there causes disturbance during school hours. The play-ground is small. No arrangement is made for providing filtered water.

Results obtained on the examination of 5,670 boys.

Defects	Average percentage.
Uncleanly head and body & nail	... 65.09
Teeth and mouth	... 27.4
Nose and Throat	... 24.11
Malnutrition	... 13.1
Ear disease	... 10.03
Vision	... 5.9
Abdominal organs	... 3.05
Respiratory Diseases	... 3.02
Eye disease	... 2.9
Infectious or contagious disease including skin affections	... 2.01
Bones and joints	... 1.8
Nervous Psychic system	... 0.95
Speech	... 0.72
Circulatory system	... 0.56
Hearing	... 0.41
Tuberculosis	... 0.32
Other diseases or defects	... 2.13

Lt-Col. Donovan's results on his examination of 1,201 boys in 1916.
(Embodied in G. O.No. 945 Home (Education) dated 7-9-1916.

Defects.	Av. percentage.
Pediculi	... 51.15
Enlarged Tonsils	... 75.60
Adenoids	... 26.14
Myopia	... 2.74
Itch on the hands etc.	... 17.23
Enlarged Spleen	... 11.24
Suspicious marks of leprosy	... 5.91
Pigeon-breasted	... 6.99
Bad Teeth	... 11.99
Squint	... 0.75
Granular lids	... 6.20
Leprosy	... 0.33

Form A.

Corporation School _____

Dated, _____ 192 .

FROM

The Headmaster,

Corporation School,

Dear Sir,

It has been arranged that the health of the children attending the Corporation School should be periodically examined with a view to its improvement and with this object the medical inspector will examine your ^{son} _____ _{ward} on _____ at about _____

Some information about the health of the child in the past is necessary to know the conditions which affect his health adversely. It will be of great help in examining the child if you could kindly spare a little time and attend the school at the time of examination.

I remain,

Dear Sir,

Yours sincerely,

Headmaster.

Form B.

Medical Inspection of Children Attending Corporation School _____

I Standard _____

II „ _____

Admission No. _____

III „ _____

IV „ _____

V „ _____

Name _____ Sex _____ Date of birth _____

Nationality and Caste _____

Address or Residence _____

Personal History:

(a) Previous History

- | | | |
|-----------------------|--------------------|-------------------------------|
| (1) Fevers | { Malaria _____ | |
| | { Typhoid _____ | |
| | { Kala-Azaar _____ | (5) Whooping cough _____ |
| (2) Small-pox _____ | | (6) Rickets, Scurvy etc _____ |
| (3) Chicken-pox _____ | | (7) Epilepsy or fits _____ |
| (4) Measles _____ | | (8) Other Complaints _____ |

(b) Family History (if exceptional):--

General Observations :—

- (1) Social condition _____
- (2) Economic condition of parents or guardian _____
- (3) Home condition and environment _____
- (4) General conduct and get up of pupil _____

Medical History Sheet.

Date of Inspection.	Complaint.	Treatment and General Remarks.

	1	2	3	4	5	6
1 Date of inspection						
2 Standard and regularity of attendance						
3 Age						
4 Physical exercise						
5 Clothing						
6 Height						
7 Weight						
8 Chest measurements						
(a) Greatest inspiration						
(b) Greatest expiration						
9 Nutrition						
10 Cleanliness and Conditions of skin of						
(a) Head (hair)						
(b) Body						
(c) Nails						
11 Teeth and mouth						
12 Nose and Throat (sense of smell, mouth, breathing, adenoids, enlarged, tonsils cervical or submaxillary glands etc.)						
13 Eye disease						
14 Vision						
15 Ear Disease						
16 Hearing						
17 Speech						
18 Circulatory System						
19 Tuberculosis						
20 Respiratory Diseases						
21 Abdominal organs (Hernia, Hydrocele, enlarged spleen etc.)						
22 Bones and joints (Deformities, spinal disea- ses etc.)						
23 Nervous and psychic systems						
24 Infectious or Contagious disease						
25 Other diseases or defects						

Form C.

Medical Inspection of Children Attending Corporation School_____

Name of pupil _____

Standard _____

Address _____

MEDICAL HISTORY SHEET.

Date of Inspection.	Complaint.	Treatment and General Remarks.	Signature of the Parent or Guardian and date

CONSERVANCY.

The conservancy of the city continued to be under Dr. C. Singaravelu, Officer in charge of Conservancy during the year. Two conservancy Supervisors were, as in previous year, in charge of the supervision of the two ranges of the city. The immediate supervision of the conservancy of the 30 divisions continued to be under 14 Sanitary Inspectors aided by 14 Assistants and 2 to 3 peons for each division, as was found necessary. Thus the staff consisted of 2 conservancy Supervisors, 14 Sanitary Inspectors, 14 conservancy assistants and 95 peons for supervising the cleansing of the city. The work of the staff was uniformly satisfactory. The conservancy of the city was maintained in an efficient condition.

Cleansing Staff.—There were 315 men 110 women and 35 boys engaged for the cleansing work of the city. The details of the staff of coolies are given below.—

Sweeper maistries	...	...	30
Street sweepers	...	...	322
Side cooly maistries	...	...	23
Side drain coolies	...	...	210
Cesspool boys	...	...	35
Silt trap coolies	...	...	25
Latrine men	...	...	99
Latrine women	...	...	110
Box-cart men	...	...	1
Sewage Hand cart men	...	...	40
Reserve sweepers	...	...	35
Night conservancy sweepers...	...	...	25
Total			960

Bullock and cart Depots.—There were six conservancy cart depots each in charge of a superintendent. These superintendents continued to be under the direct control of the chief superintendent who is responsible to the officer in charge of conservancy for the proper conduct of the depots and for the health of the bullocks under his charge. The details of carts and coolies are as follows :—

1. For the removal of rubbish:—

Rubbish carts (single draught)	...	...	255
do. (double draught)	...	...	42
Trollies	...	...	75

2. For the removal of filth:—

Cylindrical night soil carts	...	...	4
Iron night soil carts (single draught)	...	...	200
do. do. (double draught)	...	...	71
Lorries (4 wheelers drawn by bullocks)	...	...	8

3. For the removal of silt and liquid sewage.—

Box carts	55
-----------	-----	-----	-----	----

4. Details of depot staff:—

Depot maistries	...	...	6
Driver maistries	...	...	18
Rubbish cart drivers	...	...	277
Trolly drivers	...	...	75
Night soil cart drivers	...	...	275
Box cart drivers	...	...	55
Lorry drivers	...	...	8
Reserve Drivers	...	...	32

Cooly lines —60 rooms were constructed for coolies in the Koravan-kulam site in Choolay but owing to an objection from the residents of the locality for housing scavengers in the locality the matter remained unsettled- 149 coolies have been accommodated in the existing lines in other parts.

Conservancy bullocks.—The number of bullocks on hand on 1st January 1923 was 956 against 1064 in the previous year. 140 bullocks were purchased during the year making up a total of 1096. Of these 69 died, 34 were condemned and sold, leaving a balance of 993 at the end of the year. Detailed statements for the calendar years 1922 and 1923 and the official years 1922-23 and 1923-24 are given in annexures Nos. I and II.

Health of bullocks.—The health of the animals during the year under report was satisfactory. There were 69 deaths during the year under report as against 195 in the previous year, i.e., 22 bullocks died of natural causes against 63 in the previous year and 47 of infectious diseases against 132, in the previous year and 34 were condemned and sold against 63 in the previous year.

Trypanasomiasis and multiple abscesses:—There were a few attacks of Trypanasomiasis in B and E depots and a few attacks of multiple abscesses (Bovine Lymphangitis) in A, B and D depots. Animals that suffer from the latter disease get into a low condition, and lose vitality for prolonged periods.

Anthrax.—This disease was prevalent in a sporadic form during the year and claimed 21 victims. Sanitary precautions were taken to prevent the spread of the disease by (a) separating immediately after the first case all

healthy ones from the sick or suspected bullocks (b) digging up the stalls and soaking the ground with disinfectants and (c) remaking them by fresh earth and gravel.

Tuberculosis:—This disease was noticed in A, C and D depots during the year under report. The animals were carefully watched and the suspected ones were segregated and tested. There were 8 deaths from this disease during the year.

Foot and mouth Diseases:—This disease was prevalent during the greater part of the year in an endemic form. There were 51 attacks in D, E, and F depots from February to April 1923; 58 attacks in B depot from April 1923 to May 1923 and 61 attacks in C depot from June 1923 to July 1923, thus making total attacks of 170. All precautionary measures such as isolation of sick animals and disinfection of stalls were taken and antiseptic foot baths were given. There were no casualties due to this disease.

Conservancy carts ;—During the year under report 4 Trolleys 11 single draught rubbish carts, 28 single draught night soil carts and 6 double draught night soil carts were newly manufactured.

Conservancy labour and Strike :—There were no strikes during the year under report. The supply of rice for Rs. 4 to each conservancy cooly every month at the rate of 4 cut measures per rupee, was continued during the year.

Out of the stock of rice purchased during 1922-23, there remained a balance of 2575 full measures at the end of 1922-23, the cost price of which was Rs. 709-5-0. 368292 full measures were purchased during the year 1923-24 for Rs. 97827-9-0. Out of this quantity, 36632 full measures costing Rs. 97411-15-3 were issued for distribution among the coolies leaving a balance of 4235 full measures costing Rs. 1124-14-9 at the end of 1923-24 and these were doled out in 393972, cut measures, the amount realized there by, at 4 cut measures per rupee, being Rs. 98493-0-0. There is thus a gain of Rs. 1081-0-9 during the year. This gain is due to rice having been purchased at a cheaper rate during the year than in the previous year, and selling the full measures in cut measures.

Motor Vehicles :—There were 12 motor lorries and a sentinel waggon with trailer during the year for conservancy work of which lorry No. 2 was completely disabled from work from 26th May 1922. Annexures III & IV give the details of the loads removed by motor lorries during the calendar years 1922 and 1923 and the Official years 1922-23 and 1923-24.

Motor lorry Tipping Platforms :—During the year under review there were 8 tipping platforms and they were situated in the following places.

1. Audiappa Mudali Street 2nd Division.
2. Near A Depot 2nd Division.

3. Near B Depot 4th Division.
4. Motor lorry Station 13th Division.
5. Langs Garden Sewage Pumping Station 20th Division.
6. Napier Park 23rd Division.
7. Pachiappa Chetty Street 24th Division.
8. Kosapet (near the public latrines) 29th Division.

*Removal and disposal of rubbish :—*The number of cart loads of rubbish removed during the year was 365287 against 342,745 in the previous year and 313416 in 1921.

Of the total quantity of rubbish removed from the city 106802 cart loads were received and burnt at the Basin Road and Krishnampet Incinerators against 118441 in the preceding year. Out of the 106802 cart loads of mixed rubbish received, 29214 cart loads of earth were separated and the remaining cart loads were incinerated, which resulted in 13860 cart loads of ashes. The ashes and screened earth were sold to private parties for reclamation and manurial purposes at the rates fixed by the Standing Committee. 13296 cart loads were sold during the year for Rs. 925-7-8 against 6739 cart loads for Rs. 510-12-0 in the previous year. There are yet heaps of burnt ash, screened earth and rubbish awaiting disposal at the incinerators. The demand for this material is not commensurate with the daily accumulations.

The remaining quantity of rubbish collected in the city was removed to the two rubbish depots appointed by the Commissioner under Section 194 of Act IV of 1919 viz., Korukupet Rubbish Depot and Brickilm Road (Ottary) Rubbish depot.

*Disposal of Filth :—*The two pail depots, one at Ice House Road and the other at Langs garden worked throughout the year. A third one at D' Mellows Road was opened in the month of May of the year, 128696 cart loads of filth were removed during the year against 129,178 cart loads in the preceding year. Of these 42,437 $\frac{3}{4}$ cart loads were crushed, liquified and flushed into sewers in the said pail depots and the rest were trenched in the Korukupet and Ottery trenching grounds. The amount realized by the sale of manure from these trenching grounds during 1923-24 was Rs. 16250 against Rs. 17,800 in the previous year.

*Removal and disposal of silt, side scraping &c, —*23112 cart loads of silt side scrapings &c., were removed during the year. They were used for covering rubbish at dumping grounds and for reclamation of low lands.

*Disinfection :—*1098 gallons of Hycol, 483 gallons of Hydro-carbon, 75 gallons of Phenyle and 718 Parabs of chunam were used for disinfection purposes

against 545 gallons of hycol, 15 gallons of Sanitas Okol, 1560 gallons of hydro carbon, 105 lbs of bleaching powder and 640 parahs of chunam in the previous year.

Scavenging of Private Latrines :—Under Section 197 of Act IV of 1919 the Corporation undertook the conservancy of some private institutions and the income derived therefrom is Rs. 18827-0-10 against Rs. 17761-10-7 in the previous year.

Public Latrines :—The number of public latrines in the city during the year was 161 of which 66 were sanded ones, 54 flush out latrines and 41 masonry; 4 new latrines were constructed during the year and 3 masonry ones were converted into flush out, 25 latrines were repaired during the year. 4 Urinals and one flush out depot were also constructed during the year.

Dust bins :—During the year 718 new dust bins were provided against 392 in the previous year. 8 old ones were repaired.

Prosecutions :—72 prosecutions were instituted during the year for washing night soil into public drains against 113 in the previous year. The fines imposed amounted to Rs. 58-12-0.

Paracherries.—Special attention was paid to the cleaning of paracherries and hutting grounds and the special staff employed in the previous year to clean them, continued.

Malaria Work.—18 insanitary tanks were cleaned during the year. The Nulla in Jagannathapuram, was cleaned and hyacinth plants were removed therefrom. Reclamation of insanitary tank in Bao Bab, Teynampet, undertaken during the previous year was continued and the reclamation of insanitary tank in Parthasarathy Pcttah was undertaken during the year. Anti malarial drains were systematically cleaned during the year by the staff employed for the purpose.

I regret to report that as this report was being drawn up, Dr. Singaravelu Mudaliar, Conservancy Officer, who went on 3 months leave from 20th April 1924 on grounds of health died on 14th May 1924. In his sad and untimely demise the Corporation has lost a very popular and efficient officer whose place cannot be easily filled up and it is only proper that we of the Health Department record our great sense of sorrow at his loss from our midst.

K. RAGHAVENDRA RAO,

Health Officer.

ANNEXURE I.

Statement of Bullocks for the calendar years 1922 and 1923.

Depot.	1922										1923							Remarks.		
	Balance on hand on 1-1-22.	New bullocks received.	Bullocks received from other depots.	Total.	Died of natural causes.	Died of infectious diseases.	Condemned and sold.	Transferred to other depots.	Total.	Balance on hand on 31-12-22.	Balance on hand on 1-1-23.	New bullocks received.	Bullocks received from other depots.	Total.	Died of natural causes.	Died of infectious diseases.	Condemned and sold.		Transferred to other depots.	Total.	Balance on hand on 31-12-23.
A	162	3	52	217	17	40	17	...	74	143	143	29	3	175	7	18	6	3	34	141
B	276	75	7	358	14	67	21	32	134	224	224	17	...	241	3	6	8	...	17	224
C	184	18	32	234	10	4	8	9	31	203	203	19	...	222	4	4	2	...	10	212*
D	143	16	...	159	5	6	7	27	45	114	114	29	...	143	3	4	4	...	11	132†
E	176	20	...	196	13	14	8	...	35	161	161	31	...	192	3	12	11	...	26	166
F	123	19	...	142	4	1	3	23	31	111	111	15	...	126	2	3	3	...	8	118
Total ..	1,064	151	91	1,306	63	132	64	91	350	956	956	140	3	1,099	22	47	34	3	106	993

* 2 Lent to slaughter house temporarily.

† 2 Lent to slaughter house temporarily.

ANNEXURE II.

Statement of Bullocks for the official years 1922-1923 and 1923-1924.

Depot.	1922—1923.										1923—1924:										
	Balance on hand on 1—4—22.	New bullock received.	Bullocks received from other depots.	Total.	Died of natural causes.	Died of infecti- ous diseases.	Condemned and sold.	Transferred to other depots.	Total.	Balance on hand on 31—3—23.	Balance on hand on 1—4—23.	New bullocks received.	Bullocks received from other depots.	Total.	Died of natural causes.	Died of infecti- ous diseases.	Condemned and sold.	Transferred to other depots.	Total.	Balance on hand on 31—3—24.	Remarks.
A	133	15	52	200	12	35	4	...	51	149	149	17	3	169	8	18	6	4	36	133	
B	218	76	6	300	2	33	10	31	76	224	224	16	...	240	3	6	8	...	17	223	
C	206	28	2	236	7	4	4	10	25	211	211	9+1 from Park.	1	222	6	5	2	...	13	209	
D	119	33	...	152	4	7	1	12	24	128	128	12	...	140	2	5	4	...	11	129	
E	156	28	...	184	7	8	4	...	19	165	165	23	...	188	6	8	11	...	25	163	
F	106	25	...	131	5	1	2	7	15	116	116	9	...	125	1	3	3	...	7	118	
Total ...	938	205	60	1,203	37	88	25	60	210	993	993	87	4	1,084	26	45	34	4	109	975	

ANNEXURE III.

Statement showing the No. of trips made by conservancy motor lorries
and Sentinel waggon during the Calendar year 1922.

No. of lorry and Sentinel waggon.	No. of trips made in												Total No. of trips made by each vehicle.	Remarks.
	January 1922	February 1922.	March 1922.	April 1922.	May 1922.	June 1922	July 1922.	August 1922.	September 1922.	October 1922.	November 1922.	December 1922.		
Lorry No. 1	169	40	137	24	143	513	12801 Lorry loads.
Do. 2	83	138	129	135	86	1	5	...	...	...	...	...	577
Do. 3	68	59	173	75	113	...	...	...	...	...	12	...	500
Do. 4	...	...	...	...	...	1	119	98	180	72	138	156	764
Do. 5	181	28	...	23	124	117	48	96	64	160	97	39	977	
Do. 6	229	170	149	195	204	119	134	64	225	73	131	...	1693	
Do. 7	102	128	95	182	144	221	199	168	109	156	162	161	1827	
Do. 8	106	219	185	160	149	212	202	177	109	87	103	168	1877	
Do. 9	225	179	240	185	127	199	130	157	221	57	79	194	1993	
Do. 12	215	209	201	206	143	124	152	202	171	178	168	111	2080	
Sentinel Waggon No. 4	21	56	102	101	280	=560
											Grand	Total ...	13361 Lorry loads.	

Statement showing the No. of trips made by conservancy motor lorries
and Sentinel waggon during the Calendar year 1923.

No. of lorry or Sentinel Waggon.	No. of trips made in.												Total No. of trips made by each vehicle.	Remarks.
	January 1923.	February 1923.	March 1923.	April 1923.	May 1923.	June 1923.	July 1923.	August 1923.	September 1923.	October 1923.	November 1923.	December 1923.		
Lorry No. 1	63	88	159	173	187	140	155	89	145	1199	Disabled.
Do. 2	...	...	...	...	...	...	...	...	...	...	...	...	...
Do. 3	...	...	...	...	...	...	...	...	...	...	...	...	...
Do. 4	149	74	166	111	10	33	64	164	63	100	113	15	1062	
Do. 5	101	76	48	160	164	...	...	...	...	...	...	72	621
Do. 6	1	44	147	132	152	154	129	172	145	153	79	107	1415	
Do. 7	157	129	124	138	137	146	62	15	114	111	33	159	1325	
Do. 8	135	165	125	131	99	123	188	169	155	157	64	14	1525	
Do. 9	170	98	...	...	...	...	...	65	113	92	117	125	780
Do. 12	100	123	87	...	60	91	96	69	101	48	106	110	991	
Do. 13	11	86	124	112	141	140	152	117	123	60	1066	10988 Lorry loads.
Do. 14	...	...	7	103	141	114	109	139	94	58	111	118	994
Sentinel Waggon No. 4	88	75	85	80	72	85	96	79	30	80	92	127	989	=1978
											Grand	Total ...	12966 Lorry loads.	

ANNEXURE IV.

Statement Showing the No. of Trips made by conservancy motor lorries & Sentinel waggon during the official year 1922-23.

No. of lorry or Sentinel Waggon.	No of trips made in												Total No. of trips made by each vehicle.	Remarks.
	April 1922.	May 1922.	June 1922.	July 1922.	August 1922.	September 1922.	October 1922.	November 1922	December 1922.	January 1923.	February 1923.	March 1923.		
Lorry No. 1	40	137	24	143	63	88	159	654	} 11668 lorry loads.
Do. 2	135	86	1	5	...	...	...	...	...	...	...	...	227
Do. 3	75	113	...	...	...	...	...	12	...	...	...	...	200
Do. 4	...	...	1	119	98	180	72	138	156	149	74	166	1153
Do. 5	23	124	117	48	96	64	160	97	39	191	76	48	993	
Do. 6	195	204	119	134	64	225	72	131	...	1	44	147	1337	
Do. 7	182	144	221	199	168	109	156	162	161	157	129	124	1912	
Do. 8	160	149	212	202	177	109	87	103	168	135	165	125	1792	
Do. 9	185	127	199	130	157	221	57	79	19	170	98	...	1617	
Do. 1	206	143	124	152	202	171	178	168	11	100	123	87	1765	
Do. 13	...	...	...	...	...	...	...	...	...	...	...	11	11
Do. 14	...	...	...	...	...	...	...	...	...	...	...	7	7
Sentinel Waggon No. 4	21	56	102	101	75	75	85	528	= 1056 lorry loads.
Grand												Total ...	12724 lorry loads.	

Statement Showing the No. of Trips made by conservancy motor lorries and sentinel waggon during the official year 1923-1924.

No. of lorry or Sentinel Waggon.	No. of trips made in												Total No. of trips made by each vehicle	Remarks.
	April 1923.	May 1923.	June 1923.	July 1923.	August 1923.	September 1923	October 1923	November 1923.	December 1923.	January 1924.	February 1924.	March 1924.		
Lorry No. 1	173	187	140	155	89	145	110	36	...	1035	} Disabled, lorry loads 11138
Do. 2	...	...	...	...	...	...	...	...	...	...	...	...	...
Do. 4	111	10	33	64	164	63	100	113	15	...	43	125	841	
Do. 5	160	164	...	...	...	...	...	...	72	45	81	35	557
Do. 6	132	152	154	129	172	145	153	79	107	...	8	...	1231	
Do. 7	138	137	146	62	15	114	111	33	152	117	57	114	1203	
Do. 8	131	99	123	188	169	155	157	64	14	167	153	162	1582	
Do. 9	...	...	...	...	65	113	92	117	125	110	84	75	781
Do. 12	...	60	91	96	69	101	48	106	110	31	...	91	803	
Do. 13	86	124	112	141	140	152	117	123	60	89	150	121	1415	
Do. 14	103	141	114	109	139	94	58	111	118	164	102	49	1302	
Do. 17	...	...	...	...	...	...	...	...	...	84	145	159	388
Sentinel Waggon No. 4	80	7	85	96	79	30	80	92	127	126	88	99	1054	= 2108 lorry loads.
Grand												Total ...	= 13246 lorry loads.	



A Prize Winner and a Competitor, Baby Week, January 1924.
Both belong to the Child Welfare Scheme.

REPORT ON THE WORKING OF THE CHILD WELFARE SCHEME 1923.

The year 1923 is as much an year of progress as its predecessors in the short history of the Child Welfare Scheme. In due recognition of the widespread demand for the services of the scheme, the Corporation opened yet another centre in Nungumbankkam in September 1923. This centre had been sanctioned as early as November 1922, but unfortunately its opening was delayed largely owing to the lack of a suitable building. The same difficulty was experienced in opening the second centre in George Town and it therefore does not seem out of place to emphasize even at the beginning of a report the great need there is for the Corporation to erect its own buildings required for centres in various parts of the City.

An event which stands out markedly in the year under review is the Child Welfare Exhibition and Baby Show which were held for the first time under the auspices of the Corporation during the first week of February. His Excellency Lord Willingdon opened the Exhibition and Her Excellency the Lady Willingdon gave away the prizes to the winners in the Baby Show. The Baby Show was literally a roaring success as any who visited the Soundarya Mahal on the morning of the 3rd February would testify. The Mahal, which was kindly placed at the disposal of the Corporation by Dewan Bahadur Salla Guruswami Chettiar was crowded with about 400 baby competitors, the majority of whom had been sent by the Child Welfare Scheme, and the Madras Maternity and Child Welfare Association. Yet a large number of babies entered who had not been sent by either of these organisations.

Prizes were awarded by Her Excellency the Lady Willingdon, Dewan Bahadur Sir P. Tyagaraya Chettiar, the Hon'ble the Rajah of Panagal, Dewan Bahadur Salla Guruswamy Chetty and by several Municipal Councillors. Her Excellency's special prize was won by Baby Conceicao who was 7 months and weighed 21. lbs! The readiness with which the mothers handed their babies to be weighed, and the eager anxiety with which the opinion of the judges was awaited were welcome encouragement to those who had striven hard, hardly six years ago to create a desire on the part of parents to rear healthy, happy babies. The change in the mothers' feeling from superstitious fear which dreaded a baby being weighed and considered by outsiders to be healthy, to one of genuine satisfaction and pleasure in handing their babies with more than a hope of winning prizes, was marked indeed. Yet it must be noted that while the middle

and lower classes have broken through this fear, many a well to-do mother yet considers that the baby should not be weighed or sent for open competition. This fact was quite borne out during the last Baby Show held during the first National Baby Week in January 1924 to which a passing reference may be made in this report. The Exhibition was most popular and crowds visited it every day. More than 600 babies competed and although there was quite a large number of babies belonging to the middle classes, babies brought by hopeful mothers who had just seen the posters on the streets, yet hardly a dozen infants of well to-do Indians were to be seen at the show. About 300 babies in the care of the Child Welfare Scheme entered for the show and 12 out of the 16 group prizes offered were won by Child Welfare Scheme babies. The special prizes for the best Indian baby and for the best twins were also won by babies of our scheme.

The Medical Staff:—The number of Lady Doctors in charge of centres rose from four to five in 1923. Miss. Kulandaivelu acted as Superintendent during my absence on leave from September to November 1923, Miss. Atchat acting for Miss. Kulandaivelu during this period in Purasawakam Centre, Mrs. Rodrigues in charge of the Washermanpet centre was also away on leave for some time and Health Visitor Gopi Bai acted for her. Health Visitor Manonmani was in charge of the Nungumbaukam centre till Miss Atchat was appointed.

The Health Visitors.—The number of Health Visitors sanctioned by the Council rose from 9 in 1922 to 16 in 1923 Two of these were appointed to the newly opened centre in Nungumbaukam, two others for the Washermanpet and Purasawakam Centres and three more appointed as extra Health Visitors in order that special attention may be paid to cherries.

A total of 50,906 visits were paid by the Health Visitors to the houses of the people. 3504 visits were paid to the cherries 380 prematurity cases were looked after, and 516 cases conducted in them. 34 cherries were visited in all.

3,501 Prematurity cases were registered by the Health Visitors in all the centres.

The thanks of the Child Welfare Scheme are due in no small measure to the Madras Presidency Maternity and Child Welfare Association which through its several baby welcomes, and to the Government Maternity Hospital which through its medical woman worker, are carrying on most useful work in the cherries, and the staff the the Child Welfare Scheme has been helped not a little by these agencies in their efforts to break through the ignorance of the people. As a matter of fact it may be remarked that the Child Welfare Scheme find much less difficulty now in the cherries than in the homes of the poorer classes of Mahommandans and caste Hindus, some of whom either consider themselves too respectable or are too terrified to go to a Hospital, even if death be the only alternative.



Health Visitors who passed out of the School in May 1923. Their diplomas were given during National Baby Week, January 1924.



A call to a case of labour being registered at the Centre.

Hundreds of babies are being bathed daily in the several Baby Welcomes of the City, and the readiness and trust with which these children run into the Baby Welcomes will no doubt repeat itself in later years, when they would need to go to a more advanced sanitary or medical authority for far greater evils than mere dirt.

Five probationary Health Visitors were presented for and passed the test held in May 1923 by the Board of Examiners approved by Government, and were given their diplomas at the National Baby Week Exhibition held in January 1924. Two of these held scholarships from the Madras Maternity and Child Welfare Association during the period of training and have since been employed on the staff of the Child Welfare Scheme. Six were admitted in May 1923 and two of these hold scholarships from the same Association.

The work of the Health Visitor is the pivot on which all child welfare work turns. Although I have appealed for it in two successive reports, our ideal of appointing one Health Visitor for each division is yet to be realised. The infantile mortality of the scheme is 201.9 per mille as against 254.0 for the city, and it may be safely assumed from the figures that the educative work of the Health Visitors and nurses have contributed not a little to this marked reduction in the rate. Attention may here be invited to the fact that local authorities in England and Wales employ a staff of over 3,000 Health Visitors and spend 31 per cent of the total expenditure on maternity and child welfare work on their salaries.

Midwifery.—The midwifery service of the scheme continued to maintain its popularity and the cry in all the centres is for a larger staff. 64,219 visits were paid by the midwives in 1923 as against 681 in 1918. 5820 cases were brought to the care of the scheme in 1923. Of these 366 were taken to the Hospitals, 4,357 were conducted by the Nurses, 1097 came to our care after barber women had conducted delivery. In several of the last group delivery had been conducted by barber women owing to the inadequacy of the staff to answer calls. I would like to take this opportunity to urge again the great need there is either to increase the staff at each centre, or to lessen the working area of each centre. A good deal of dissatisfaction now prevails owing to the fact that no nurses are available even for cases previously registered by the Health Visitors. The working area of each centre would be rendered more easily manageable if the three new centres (sanctioned by the Council in April 1923) are opened. Triplicane centre especially, as I have pointed out more than once before needs to be split up. In this centre the staff of two full time and two probationary (therefore half time) Health Visitors, and 9 nurses have paid no less than 20,762 and 21,627 visits respectively, and cared for nearly 2020 mothers and babies.

One cannot help hoping that at least before the next report is written the centre sanctioned for Meersabibpet will be a reality. The opening of the Nurgambakam centre has fully justified itself, for even during the first three months 100 cases were attended to. And yet for five long years the people of the locality had no where to turn to, but far off Triplicane for their most urgent needs. The opinion of the Ministry of Health as quoted by Dr. Broughton is that England 'the Infant Welfare Centre is regarded as almost the back bone of the whole social campaign against infantile mortality.' The number of the Centres in England and Wales rose from 250 in 1914 to 1960 in 1922, and the corresponding drop in the infantile mortality from 125 in 1914 to 80 in 1921 is, she says, significant.

There is no doubt that in areas where we have worked for some time, the people have realised the need for trained and more skilled service and almost invariably prefer the midwives of the scheme to barber women. And once this need has been realised it is surely the duty of the Corporation to provide for it: slowness on the part of the authorities to provide for the needs of the public cannot be taken as reluctance on the part of the latter to accept help. It is also to be pointed out that what the people ask for is not always the best for them. The desire on the part of some that barber women should be trained is a sign of advance, but planning as we are for the future, it is wiser perhaps to plan to meet the need which is bound to be felt by the people a short time hence, for those who ask for trained barber women now will not be satisfied with less than skilled midwives a year or two later.

The response from educated Indian women to the call for joining the nursing profession is sure, and I am truly delighted to be able to report that in the scheme to day we possess four who have passed the school final examination in English, and several who have attained to a sufficient knowledge of English in order to be able to write and speak it correctly. One has only to walk through the wards of our hospitals to see how much more advanced is the type of Indian womanhood that now seeks to be trained for service in these hospitals. The Government order that only those who have passed the Third Form can be admitted for a midwifery training is not a bit too early, for while keeping out the only class which cared to do the training in olden days, it certainly encourages a better class of Indian women to join the profession.

I would crave permission to take this opportunity once again to point out that it is all the more incumbent on authorities employing such women and on the public which enjoys their skilled services to see that they are treated as



Prematernity advice and Treatment.

they deserve to be, and are given every encouragement and help. Surely it costs us nothing to be polite to a woman who has helped us in time of need, and to talk, rather *not* to talk of her disrespectfully or disdainfully.

The Hospitals. We owe again a large debt of thanks to the Government Maternity, the Victoria Gosha, the Rainy, the Kalyani and the Rajah Sir Ramaswamy Hospitals for admitting difficult cases sent by us to them for treatment. The number of cases sent to each Hospital is as follows:--

Government Maternity Hospital	105
The Victoria Gosha Hospital	103
The Rainy Hospital	60
The Kalyani Hospital	22
The Rajah Sir Ramaswamy Hospital	70

While we certainly are not yet able to say that there is no difficulty in sending patients to Hospital, yet it is easier than it was in the past.

Prematernity work: 2380 women were treated for the various diseases and ailments of pregnancy in all the centres. Every pregnant woman who comes to the centre is examined, and necessary advice and treatment are given. Several cases where difficulties were anticipated were referred to the Hospitals. 3501 Prematernity cases were registered by the Health Visitors in all the centres.

It would be a good thing if all cases to which the staff is called have been to the centre beforehand, for the helplessness of the staff and the hopelessness of the patient to whom the nurse is first called at dead of night, a mile or two or more away from the centre for an extreme urgency is not an experience to be desired, chiefly in the interest of the patient.

Milk-Supply: Milk depots were opened in the Purasawakam and Washermanpet centre in April 1923. During the first few months the attendance at a milk depot is not quite regular as the mothers take time to learn the value of continuity and regularity in attendance, either for the milk or for the fortnightly weighing. The Triplicane centre continued to serve a great need. 113 infants were taken on for milk out of more than 2,000 that came under our supervision.

A milk depot has generously been sanctioned for the George Town centre but the appointment of a Health Visitor and a Nurse required to run the depot awaits sanction yet. As mentioned in my report for last year, the need for a milk depot is even greater in George Town than in other parts of the city.

The Dispensaries : The total number of new cases admitted in 1923 was 19,126 as against 14,372 in 1922. Of these 3,549 were infants, 3,678 children under five years of age 2,344 children between the ages of 5 and 12 and 7,463 expectant and nursing mothers. The total attendance for the year was 33535 as against 28,133 in 1922.

The Education and Training of the child : Last year one wondered whether a scheme of compulsory education for boys as well as for girls would ever be passed for the city. This year it is most gratifying to note that such a scheme has been passed. A note of regret has been struck though in that Muhammadan girls have not been included in the scheme. Whatever the reasons may have been for such exclusion it is surely for the advance of the Muhammadan population of this city and for the welfare of their women and children that such reasons are quickly removed. It does not seem as if there ought to be any difficulty in the case of girls between the ages of five and 10, for such young children do not observe purdah in the homes of poor Mahomedans.

The untrained mind is always hard to deal with. Although most of the poor and illiterate in this city are blest with rude native intelligence, argument is out of the question, and the wall of blunt, obstinate opposition to any process of reasoning is the hardest problem to grapple with in cases of extreme urgency. Nor is it the stubbornness of one that the anxious midwife or doctor is confronted with, but that of half a dozen or more, relatives, friends, well-wishers and others collected on the spot out of sheer curiosity. Fortunately these instances grow less and less every year of our work but they certainly have not ceased to exist even yet. The scheme of compulsory education is therefore bound to have in a few years time a very beneficial effect on the general work of the scheme and on the health and welfare of our mothers and children.

Our Visitors : Dr. M. I. Balfour, Chief Medical Officer, Women's Medical Service for India, and Secretary, Lady Chelmsford All India League for maternity and Child welfare paid her annual visit and inspected all our centres. She made the following remarks :

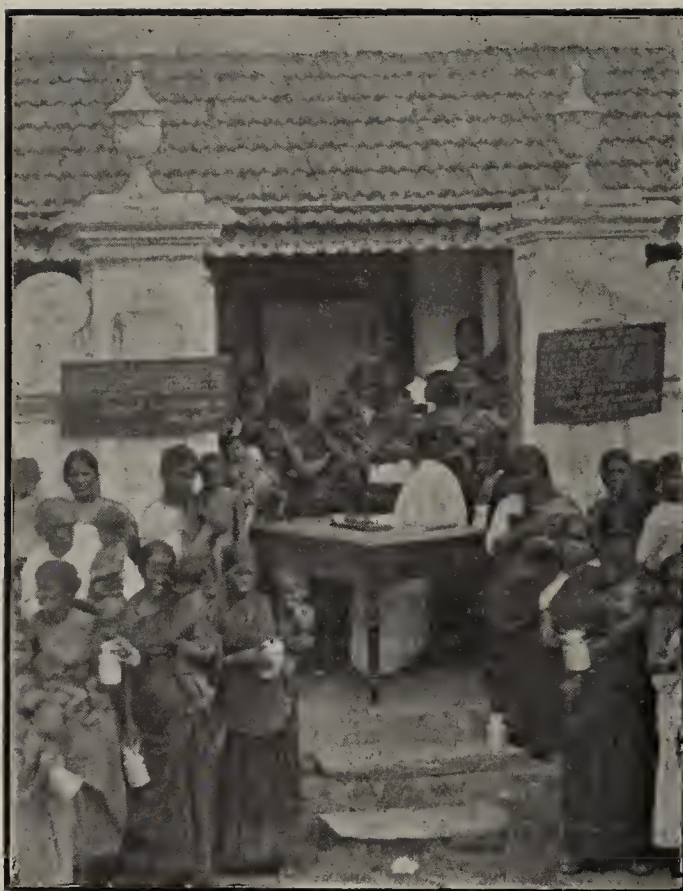
"I was very pleased to visit today with Dr. Chinnappa the Child Welfare Centres. In the last two years considerable progress has been made. The staff has been increased, a new centre opened, and a school for training Health Visitors has been organised. The school is now in its second year, 5 students having passed out the first year. The number of labour cases attended by the centre nurses have increased and now form a good proportion of the



Twins in need of milk.



Twins receiving milk from the Depot. The two Mohamedan Babies won the Special Prize for twins. National Baby Week, January 1924.



The Infant Clinic, Purasawalkam Centre.

total city births (3968) It remains a question whether the barber women will ever be entirely ousted, but the work of the midwives and the knowledge spread by the Health Visitors cannot fail to improve their work. I think both the organisation and administration of the scheme are excellent and do Dr. Chinnappa the greatest credit.

3-11-23

Sd. M. I. BALFOUR

Secretary, Lady, Chelmsford League.

Dr. Balfour has left India after a period of thirty years of devoted service to the women of India, and although most of her life was spent in Northern India, yet we even here in far-off Madras feel we cannot adequately thank her for her invaluable advice to us especially in the early days of our work.

Lt. Col. Ross, I. M. S. Organising Secretary, Indian Red Cross Society also visited us and wrote as follows:—"Dr. Chinnappa has shown me the working of the Triplicane centre and also carefully explained the working of the scheme. There can be no doubt as to the great value of the work being done and the displacement of the barber is only a question of time. The manner in which the working of these centres has been developed must have entailed an immensity of labour and Dr. Chinnappa is to be congratulated on the success she has attained."

The Madras Branch of the Indian Red Cross Society has through the Madras Maternity and Child Welfare Association helped child welfare work in this city to a great extent.

Conclusion: It seems but fitting to conclude this report with a statement of our needs. Work has grown enormously since 1918, the number of cases conducted by the staff of the scheme being 5820 in 1923 as against 550 in 1918. These figures speak for themselves as to the rapidly growing demand there is for the service, of the scheme. People even in the utmost corners of the areas of our work have begun to realise more fully the needs of their women and children, and where it was difficult to get people to come for help, it is now difficult owing to the large demand, to provide the help asked for. The reasons for this I have stated more than once before; the working areas of our centres are too large and our staff too small at each centre. The Council would do well to open the three new centres sanctioned for Meersahibpet, North George Town and Royapuram and sanction yet another for Perambore. The 16th division needs to have its own child welfare centre. Several requests have been made by the residents

of the 30th division for midwifery assistance and it has not been possible to meet their needs owing to the lack of a centre in Meersahibpet. Statement VIII shows that 1,210 and 686 births occurred last year in the 16th and 30th divisions respectively. These divisions are the least served in the city.

A motor ambulance has yet to be provided, although this is the third year the request has been made.

It is true that we have been fortunate in getting more suitable houses for the centres in Triplicane and George Town but the difficulty still continues in Washermanpet always a difficult locality. Quarters for the staff here need to be built very early.

A good work has been begun and has been continued by the Corporation, and an appeal is now made to them that the work be furthered yet. I have no doubt that the appeal on behalf of the women and children of this city will have a ready response, but I ask for a little more sympathetic understanding of the difficulties of a pioneer work and the results accomplished by a staff of Indian women in a new field. This will awaken helpful interest in what seems the smallest enterprise of the Corporation, undertaken nevertheless for the lowliest the poorest and neediest, and may I add, the youngest of the City's population, but which in reality is rich with promises of a great future.

L. N. VIRA SINGHE CHINNAPPA, M.B., B.S.,

Superintendent.

Child Welfare Scheme,

Corporation of Madras.

STATEMENT No. I.

Showing the cases of labour conducted by the staff of the Child Welfare Scheme from January to December 1923
with comparative Statements for years 1918-1922.

Period.	Centres.	How Conducted.			Total cases.	Caste.	
		By Nurses of the C.W.S.	Taken over after B. W. conducted labour.	Taken to Hospital.		Mahamans.	Non-Mahamans.
From 1st January to 31st December 1923.	... Triplicane	1,542	321	157	2,020	792	1,228
	Washermanpet	776	264	95	1,135	153	982
	Purasawalkam	1,161	351	73	1,585	163	1,422
	George Town	818	127	35	980	56	924
	Nungambakam	60	34	6	100	18	82
	Total for 1923	4,357	1,097	366	5,820	1,182	4,638
	" 1922	3,968	1,213	368	5,549	1,074	4,475
	" 1921	3,060	796	256	4,112	831	3,281
	" 1920	2,953	672	203	3,828	...	...
	" 1919	978	108	87	1,173	561	612
	" 1918	550	77	54	681	...	...

STATEMENT I (b).

Showing the number of Prematernity cases registered and diseases and ailments of Pregnancy treated at the Centres.

Centres.	Constipation.	Dysentery.	V. D. H.	Albuminuria.	Syphilis.	Malaria.	T. P.	Worms.	Belampais.	Bronchitis.	Diarrhoea.	Rheumatism.	Anaemia.	Flatulence.	Strangury.	Dyspepsia.	Enlarged spleen.	Neuritis.	Retention of urine.	Stomatitis.	Eczema Vulva.	Otorrhoea.	Ulcer vulva.	Influenza.	Pyorrhoea.	Jaundice.	Colic.	Sciatica.	Pneumonia.	Dental caries.	Oedema.	Morning sickness.	Contracted pelvis.	Asthma.	Breast abscess.	Total.
Triplicane	225	4	...	17	...	1	...	5	...	26	4	...	149	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	432
Washermanpet	619	10	3	19	3	5	3	2	3	21	2	2	98	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	780
Purasawalkam	360	13	...	14	...	6	...	36	...	44	7	2	133	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	623
Goerge Town	203	18	9	9	...	49	3	63	...	21	3	1	106	1	4	1	1	1	...	20	1	5	3	4	1	1	1	1	1	1	1	1	...	...	...	532
Nungambakam	12	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
Total	1,419	45	12	59	3	61	6	106	3	11	16	5	477	1	4	1	1	1	1	1	20	1	3	3	5	1	2	1	1	1	1	1	1	2	2	2,380

Total Number of Prematernity cases Registered at the various centres.

Triplicane	955
Washermanpet	780
Purasawalkam	783
Goerge Town	944
Nungambakam	39
Total	3,501

STATEMENT II.

Maternal Morbidity (Puerperal) 1923.

Centres.	Eclampsia.	A. P. H.	P. P. H.	Adherent Placenta.	Placenta Praevia.	Retained Placenta.	Albuminuria.	Forceps.	Sepsis.	Sapraemia.	Sub Involution.	Gonorrhoea.	Malaria.	Influenza.	Anaemia.	Dysentery.	Pneumonia.	Bronchitis.	T. P.	Smallpox.	Syphilis.	Diarrhoea.	Jaundice.	Asthma.	Indigestion.	Piles.	Breastabscess.	Constipation.	V. D. H.	Mumps.	Rheumatism.	Causes unknown.	Difficult cases taken to the Hospital.	
Tripticane	...	8	327	...	...	...	18	...	4	...	...	...	4	...	156	12	1	19	1	1	...	2	2	...	...	...	1	1	2	...	...	...	157
Washermanpet	112	1	...	...	7	1	...	3	...	...	2	...	89	14	1	7	3	1	2	3	...	...	...	...	...	1	...	1	...	2	95	
Purasawalkam	4	...	...	12	...	...	...	...	...	3	3	110	14	...	5	...	...	...	5	...	...	2	...	5	...	...	...	...	...	78	
George Town	...	4	...	5	4	...	3	5	6	...	6	1	2	9	1	44	12	2	1	1	...	4	...	2	2	7	...	2	...	3	...	1	...	35
Nungambakam	4	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	
Total...	12	4	48	4	...	3	42	7	4	9	1	2	18	4	353	53	4	33	5	1	8	10	2	2	2	9	1	9	2	4	1	1	2	366

STATEMENT III.

Maternal Mortality (Puerperal) 1923.

Centres.	Tubercular enterities.	P. P. H.	V. D. H.	T. P.	Causes unknown.
Triplicane	1	1	...	...	...
Washermanpet ...	...	...	...	1	2
Purasawalkam ...	...	...	2	...	...
George Town ...	...	...	1	...	...
Nungambakam ...	...	...	...	...	...
Total ..	1	1	3	1	2

Deaths among cases brought to the notice of the Child Welfare Scheme but not under our treatment.

	Trip. C.	Wash C.	Pur. C.	G.T.C.	Nung C.
(1) Under Private Doctors	2	1	...	3	...
(2) In Hospitals (Cases taken by C. W. S.)	4	3	6	4	...
(3) Under Vythians treat- ment	...	1	...	1	...

Maternal mortality rate

(1) for Cases in care of C. W. S. 0.1 per cent

(2) for Cases brought to the
notice of C. W. S. 0.56 per cent

Note.—Re: 2 deaths accounted for in column 6, in one case the patient according to her own statement had been undertreatment in Hospital for Diabetes. She delivered suddenly in the home and died comatose within a few hours. In the other, the cause of death was unknown, as the woman refused our treatment.

STATEMENT IV.

Table showing the total attendance of children and mothers at the Child Welfare Centres during 1923.

From 1st January to 31st December 1923	Age.				Total attendance	Nature of disease.							Total attendance for the years	Pregnant Women treated at the centre	Average daily attendance	
	Under one year.	1 to 5 years	5 to 12 years.	Women.		Respiratory.	Alimentary.	Skin affection.	Influenza.	Ear and eye disease.	Malaria.	Syphilis.				Other causes.
...
Triplicane	2,532	1,510	1,017	1,993	7,052	1,048	3,168	1,356	72	175	45	10	1,178	12,092	1,993	33
Washermanpet	1,100	669	464	1,485	3,718	661	1,284	264	130	183	Nil	7	1,190	4,436	364	12
Purasawalkam	1,600	634	191	2,172	3,652	845	403	267	41	120	163	13	1,800	6,426	599	17
George Town	1,177	701	550	1,742	4,170	670	918	185	Nil	133	777	Nil	1,587	10,047	780	30
Nungambakam	140	164	122	71	534	135	60	18		6	10	...	305	534	37	1
Total for	6,549	3,678	2,344	7,463	19,126	3,359	5,833	2,090	243	617	995	30	6,060	33,536	3,773	93
Do.	4,995	3,387	1,457	4,533	14,372	2,357	4,846	1,997	189	429	285	24	4,245	28,138	1,718	78
Do.	5,474	2,533	1,203	5,564	14,774	2,719	3,133	1,087	494	433	...	24	6,875	25,919	1,490	35
Do.	4,079	1,762	1,855	3,934	10,636	1,912	1,160	874	583	308	...	29	5,715	18,816	1,040	73
Do.	1,617	858	316	1,074	3,365	295	139	250	31	37	...	12	253	8,442	322	241
Do.	222	207	52	235	716	77	27	55	4	8	...	4	35	1,558	116	18

STATEMENT V.
Ages at death of infants born during 1922 and kept under observation during the first year of life.

From 1st January to 31st December 1922.	Total number of cases taken.	Still-born.	Died within.				Total deaths excluding still-born.	Not traceable.	Number of living children traceable when one year old.
			10 days.	1 to 3 months.	3 to 6 months.	6 to 12 months.			
Triplicane	2,074	65	108	60	48	85	301	317	1,391
Washermanpet	1,211	48	66	34	37	78	215	135	813
Purasawalkam	1,329	71	48	62	40	62	212	256	790
George Town	550	23	36	29	21	35	121	45	361
Total ...	5,164	207	258	185	146	260	849	753	3,355

Infantile mortality rates.

For infants in the care of C. W. S.

Total live births 4,920
Total infants traceable till one year old 4,167
Deaths among these till one year old 783
Infantile Mortality Rate for infants in the Care of C. W. S. 201.9 per Mille.

City.
1918 355.2
1919 329.
1920 279.
1921 281.9
1922 308.0
1923 254.0

276.8
231.9
173.7
222.7
201.9

STATEMENT VI.

Causes of death among infants born in 1922 and kept under observation during the first year of life.

Centres.	Total Number of cases taken.	Still born.	Pneumonia.	Influenza.	Abcess.	Enteritis.	Syphilis.	Premature.	Small-pox.	Causes unknown.	Bronchitis.	Malnutrition	Measles.	Dysentery.	Diarrhoea.	Chikoen-pox	Malaria.	Convulsion.	Enteric.	Skin diseasc.	Not traceable	Total Deaths.	No. of Children who survived the 1st year of life.
Triplicane	2,074	65	23	...	...	52	...	...	9	134	36	...	3	11	...	2	...	31	...	...	317	301	1,391
Washermanpet	1,211	48	15	20	...	35	...	...	17	77	1	8	...	...	21	...	...	17	1	3	135	215	813
Purasawalkam	1,329	71	...	2	6	29	...	7	6	12	104	...	...	31	...	...	...	15	...	...	256	212	790
George Town	550	23	8	...	...	11	7	...	1	57	17	4	...	...	...	...	16	...	...	...	45	121	361
Total ...	5,164	207	46	22	6	127	7	7	33	280	158	12	3	42	21	2	16	63	1	3	753	849	3,355

STATEMENT VII.

Showing number of visits paid by staff of Child Welfare Scheme during the year 1923.

Centres.	Midwives.	Health Visitors.	Lady Doctors.
Triplicane	21,627	20,762	621
Washermanpet	15,746	7,051	450
Purasawalkam	14,671	14,961	699
George Town	11,405	7,023	1,185
Nungambakam	770	1,109	32
Total ..	64,219	50,906	2,987

85

STATEMENT VIII.

Showing the No. of Cases taken on for Milk Supply During 1923.

Centres.	No. taken on for Milk supply.	Yearly attendance.	Average daily attendance.
Triplicane	112	32856	90
Washermanpet	80	14042	55
Purasavakam	92	16014	56
Total ..	284	62912	201

STATEMENT IX.

Table showing details of all births in the Municipal Divisions in which the scheme was working for one year ending with 31st December 1923.

1	2	3	4	5					
Child Welfare Centres.	Municipal Divisions.	Total No. of Births from 1-1-1923 to 31-12-1923	No. attended by Corporation Midwives.	Percentage to total births.					
				1923	1922	1921	1920	1919	1918
Washermanpet	1	884	63	7.1	12.4	15.7	8.9		
	2	986	189	19.2					
	3	1,236	327	26.5					
	4	813	197	24.2					
	5	200	11	5.5					
George Town	6	317	40	12.6	15.8	7.9			
	7	437	79	18.0					
	8	138	27	19.6					
	9	687	103	15.0					
	10	716	172	24.0					
	11	185	14	7.6					
	12	712	195	27.4					
	13	627	126	20.0					
	14	71	2	2.8					
	15	534	49	9.2					
Puasawalkam	16	1,210	305	25.3	22.4	18.6	15.9	18.4	
	17	1,133	299	26.4					
	18	978	282	28.8					
	19	906	117	12.9					
	20	1,285	56	4.4					
Nungambakkam	21	700	102	14.6	13.3	9.3	13.3		
	22	789	30	3.8					
	23	1,012	30	3.0					
	24	1,122	127	11.3					
	25	1,431	547	38.2					
Triplicane	26	658	240	36.5	33.1	30.7	28.5	16.3	
	27	739	124	16.8					
	28	777	277	35.6					
Not included in working area of any centre	29	1,006	195	19.4	19.1	16.2	14.9		
	30	686	32	4.7					
		22975	4357	19.0	19.5	21.7	21.3	16.4	11.9

Note.

1. The cases conducted in hospitals are as follows

Government Maternity Hospital	2768
Government Victoria Goshia Hospital	1265
Raja Sir Ramaswamy Mudaliar Hospital	1747
Christiana Rainy Hospital	489
Kalyani Hospital	357

6626

1923

1918

2. Percentage of Hospital Births to Total Births 28.8 percent 16.9
 Percentage of cases in care of C. W. S. to Total Births 25.8 percent 11.9

3. Correct figures for details of births attended by Barber Women & private medical practitioners are not available.
 4. Roughly 2 out of every 4 births in the City, either looked after in the hospital or came under the Care of the C. W. S.

STATEMENT X.

Showing the Births and Infantile mortality during 1923 and Infantile mortality rate for 1923, 1922 and 1921.

Division	No. of Births registered Excluding Still Births.	Still Births.	Infantile mortality.	Infantile mortality rate for 1923.	Infantile mortality rate for 1922.	Infantile mortality rate for 1921.
1	884	35	304	349.9	236.2	308.2
2	986	59	205	207.9	283.6	285.5
3	1,236	48	330	273.2	333.1	286.1
4	813	52	194	238.3	304.0	331.2
5	200	10	81	405.0	342.3	456.9
6	317	13	91	287.0	385.7	348.8
7	437	33	146	305.4	328.4	390.1
8	138	14	51	369.6	342.5	476.2
9	687	55	191	289.7	301.7	337.2
10	716	31	194	271.0	373.6	336.0
11	185	12	61	329.7	433.7	522.6
12	712	52	232	325.8	309.1	319.6
13	627	35	185	295.0	423.1	376.2
14	71	16	21	295.7	500.0	339.8
15	534	37	165	309.0	360.9	296.9
16	1,210	112	246	203.2	261.7	220.3
17	1,133	68	272	241.0	329.9	289.0
18	978	37	201	205.5	306.7	209.8
19	906	44	214	236.2	332.1	269.5
20	1,285	119	298	232.0	258.6	229.3
21	700	37	175	250.0	310.7	239.6
22	789	28	170	215.4	281.7	256.4
23	1,122	47	280	249.6	323.6	267.0
24	1,431	69	307	214.5	255.4	249.0
25	658	44	146	221.9	218.4	206.6
26	739	37	160	216.5	275.5	230.8
27	777	26	194	249.7	302.4	266.3
28	1,006	38	262	260.5	212.6	296.3
29	1,012	51	240	237.2	296.0	251.5
30	686	33	173	252.2	318.9	254.4
Total.	2,2975	1,312	5,837	254.0	308.0	281.9

Annual Form No. A.—Meteorological Data—Madras for 1923.

Latitude 13°4' North.
Longitude 80°15' East.

Months.	Berometer. Mean daily reading Reduced to 32° C.	Reading of Thermometer.						Difference between dew point temperature and mean air temperature.	Degree of humidity complete saturation being 100.	Prevailing directions of wind.	Number of days on which rain fell.	Rainfall.		
		Dry.					Dew Point.					Total fall of rain during the month	Maximum fall of rain during 24 hours.	
		Maximum.	Minimum.	Mean daily range.	Mean daily value.	Mean daily value.								
January	29.985	81.7	68.8	12.9	75.2	68.0	139.4	7.2	79	N. N E	7	4.46	1.72	
February	.923	85.4	69.7	15.7	77.7	68.2	150.2	9.5	75	S E	...	...	...
March	.941	88.8	73.1	15.6	81.0	70.8	154.1	10.2	74	E S E	2	0.64	0.59	
April	.767	94.2	77.9	16.3	84.8	74.2	152.0	10.6	74	S by E	...	...	...
May	.721	99.6	80.0	19.7	87.1	72.5	153.2	14.6	65	S	1	0.03	0.03	
June	.668	102.7	82.2	20.5	88.9	70.5	149.5	18.4	58	S W	9	1.96	1.13	
July	.691	98.9	79.8	19.1	86.6	68.7	138.1	17.9	59	W S W	14	1.65	0.44	
August	.731	98.4	78.7	19.7	85.3	69.0	149.9	16.3	62	S W	19	3.30	1.19	
September	.755	94.2	76.9	17.3	83.4	71.2	149.1	12.2	71	S W by S	10	3.21	1.09	
October	.864	89.5	75.0	14.5	80.8	72.9	145.6	7.9	80	S E	15	15.89	3.88	
November	.904	86.0	72.5	13.5	78.5	69.7	145.3	8.8	77	N E	5	3.63	1.62	
December	.974	83.3	71.3	12.0	76.5	68.5	140.8	8.0	78	N E by N	7	2.56	1.17	
Annual	29.827	91.9	75.5	16.4	82.2	70.4	147.3	11.8	71	S S E	89	37.33		

Annual Form No. 1.—Births registered by divisions during the year 1923.

1	2	3	4			5			6	7	8	9			10	11		
Divisions.	Districts.	Population according to the Census of 1921.			No. of Births registered.			Ratio of Births per 1,000 of Population.			Number of Males born to every 100 Females born.		Excess of births over deaths per 1,000 of Population.	Mean ratio of births per 1,000 during previous five years.			Still-Births.	* Illegitimate births.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.					
1	Royapuram	10,400	10,491	20,891	469	415	884	45.1	39.6	42.3	113.1	35.9	...	...	...	...	35	13
2	Tondiarpet	8,536	8,363	16,899	505	481	986	59.2	57.5	58.4	105.0	46.1	...	...	...	...	59	9
3	Washermanpet	11,992	11,785	23,777	608	628	1,236	50.7	53.3	52.0	96.8	114.8	...	...	...	...	48	...
4	Korukupet	8,667	7,973	16,640	442	371	813	51.0	46.5	48.9	119.1	61.3	...	...	...	...	52	...
5	Harbour	5,032	2,246	7,278	112	88	200	22.3	39.1	27.4	127.4	...	...	...	...	...	10	...
6	Muthialpet	9,670	5,961	15,631	164	153	317	17.0	25.6	20.3	107.2	...	...	...	...	...	18	...
7	Kachaleswaranpet	7,102	5,953	13,055	205	232	437	28.9	39.6	23.5	88.2	...	...	...	...	...	38	...
8	Kothawal Bazaar	3,120	1,997	5,117	59	79	138	18.9	39.6	27.0	74.7	...	...	...	...	...	14	...
9	Ammen Koil	8,095	7,725	15,820	351	336	687	43.4	43.5	43.4	104.5	...	...	...	...	...	55	...
10	Seven Wells	9,748	9,880	19,628	388	328	716	39.8	33.2	36.5	118.2	...	...	...	...	...	31	...
11	Sowcarpet	4,283	3,177	7,460	89	96	185	20.8	30.3	24.8	92.7	...	...	...	...	...	12	...
12	Peddunaickenpet	8,953	8,622	17,575	369	343	712	41.2	39.8	40.5	107.6	...	...	...	...	...	12	...
13	Trevelyan Basin	8,762	8,510	17,272	298	329	627	34.0	38.7	46.3	90.6	...	...	...	...	...	44	...
14	Esplanade	1,548	1,116	2,664	33	38	71	21.3	34.0	26.7	86.8	...	...	...	...	...	16	...
15	Park Town	9,588	7,956	17,544	246	283	529	25.7	36.2	30.5	85.4	...	...	...	...	...	37	...
16	Perambur	15,492	13,967	29,459	639	571	1,210	41.2	40.9	41.1	111.9	...	...	...	...	...	112	...
17	Chulai	12,306	11,715	24,021	572	561	1,133	46.5	47.0	47.2	101.7	...	...	...	...	...	68	...
18	Purasawakkam	10,475	10,181	20,656	504	474	978	48.1	46.6	47.3	108.7	...	...	...	...	...	57	...
19	Vepery	10,075	9,224	19,299	459	447	906	48.1	46.6	46.9	102.7	...	...	...	...	...	44	...
20	Egmore	13,870	11,757	25,627	667	618	1,285	40.8	52.6	50.1	107.9	...	...	...	...	...	119	...
21	Kilpauk	9,667	8,873	18,540	354	346	700	35.5	39.0	37.8	102.3	...	...	...	...	...	37	...
22	Nungambakkam	11,036	10,186	21,222	401	388	789	38.3	38.1	37.2	103.4	...	...	...	...	...	28	...
23	Chintadripet	12,259	11,531	23,790	577	545	1,122	47.0	47.3	47.1	105.9	...	...	...	...	...	47	...
24	Tiruvatteswaranpet	12,556	11,639	24,195	735	666	1,401	58.5	59.8	59.1	105.6	...	...	...	...	...	69	...
25	Chepauk	7,054	6,223	13,277	338	320	658	47.9	51.4	49.6	105.6	...	...	...	...	...	44	...
26	Triplacane	8,675	7,831	16,506	369	350	719	44.8	44.7	44.8	111.1	...	...	...	...	...	37	...
27	Amir Mahal	7,591	7,663	15,254	391	386	777	51.5	56.4	50.9	101.3	...	...	...	...	...	26	...
28	Mirahibpet	9,286	9,345	18,631	520	486	1,006	56.0	52.0	54.0	107.0	...	...	...	...	...	38	...
29	Rayapettah	10,875	10,440	21,315	514	498	1,012	47.2	47.7	47.5	103.2	...	...	...	...	...	51	...
30	Mylapore	9,394	8,464	17,858	351	335	686	37.3	39.5	38.4	104.8	...	...	...	...	...	33	...
Total		2,76,107	2,50,804	5,26,911	11,749	11,226	22,975	42.5	44.7	43.6	104.7	65.5	...	...	38.4	...	1,312	621

* Included in the total number of Births shown in column 4 and 10.

Annual Form No. II.—Statement of Deaths by divisions during the year 1923.

1	2	3	4	5	6	7	8	9																					
Divisions.	Districts.	Area in acre.	Density per acre.	Population according to the census of 1921.		No. of Deaths registered.		Deaths per 1,000 of Population from Deaths per 1,000 during previous five years.																					
				Males.	Females.	Total.	Males.		Females.	Total.																			
1	Royapuram	557	37.5	10,400	10,491	20,891	386	423	809	91.3	0.1	0.5	0.3	...	2.3	0.08	1.2	9.8	2.0	4.1	0.3	0.2	17.8	37.1	40.3	37.7	Not available.	Not available.	Not available.
2	Tondiarpet	464	36.4	8,536	8,363	16,899	502	406	908	123.7	...	0.5	...	...	2.5	...	2.7	12.1	2.1	6.0	0.5	1.0	20.5	58.8	48.5	53.7	
3	Washermanpet	321	74.1	11,992	11,785	23,777	492	471	963	104.5	0.04	1.7	0.04	...	2.6	...	2.2	7.8	1.5	7.0	0.4	1.5	16.4	41.0	40.0	40.5			
4	Korukupet	2,093	8.0	8,667	7,973	16,640	380	331	711	114.8	...	1.2	3.9	...	2.3	8.1	2.2	6.1	0.1	0.3	18.2	43.8	41.5	37.2	Not available.	Not available.	Not available.
5	Harbour	114	63.9	5,032	2,256	7,288	150	149	299	100.0	...	0.1	...	...	0.8	...	1.1	6.4	3.4	9.5	0.7	1.0	18.0	29.8	66.0	40.1	
6	Muthialpet	986	15.9	9,670	5,961	15,631	160	168	328	95.2	...	...	...	...	0.7	...	1.7	2.2	1.5	4.5	0.06	0.1	10.6	16.5	28.2	21.0
7	Kachaleswaranpet	112	116.6	7,102	5,953	13,055	243	199	442	122.1	...	0.2	0.5	...	1.8	4.5	2.6	7.1	0.2	0.5	16.3	34.2	33.4	33.9	Not available.	Not available.	Not available.
8	Kothawal Bazaar	96	53.3	3,120	1,997	5,117	118	94	212	125.5	...	...	...	...	3.2	...	1.6	5.7	2.7	7.8	1.0	1.9	18.6	37.8	47.1	41.4
9	Ammen Koil	110	143.8	8,095	7,725	15,820	365	372	737	98.2	...	0.6	...	...	3.9	...	1.5	7.5	3.4	6.1	0.3	1.6	21.6	45.1	48.2	46.6	
10	Seven Wells	123	159.6	9,748	9,880	19,628	479	446	925	107.4	0.05	0.3	1.9	...	0.1	8.5	3.7	7.8	0.8	0.6	21.1	49.1	45.1	47.1	Not available.	Not available.	Not available.
11	Sowcarpet	53	128.6	4,283	3,177	7,460	121	139	260	87.1	...	...	...	...	1.7	...	0.1	2.4	1.6	7.8	...	1.2	19.1	28.8	44.6	34.9
12	Peddunaickenpet	155	113.4	8,953	8,622	17,575	384	395	779	97.2	...	0.7	...	...	2.4	...	1.2	7.4	3.0	7.3	...	0.9	21.3	42.9	45.6	44.3	
13	Trevelyan Basin	114	151.5	8,762	8,510	17,272	315	335	650	94.0	2.7	...	0.6	6.0	2.2	8.5	0.2	0.8	16.3	37.1	39.4	37.7	Not available.	Not available.	Not available.
14	Esplanade	139	19.2	1,548	1,116	2,664	275	101	376	272.3	0.4	...	...	...	4.1	...	2.6	10.1	2.4	14.7	4.9	1.1	83.7	177.6	90.5	141.0
15	Park Town	120	146.2	9,588	7,956	17,544	268	315	583	85.1	0.05	0.1	...	...	2.6	...	0.3	2.6	1.7	6.9	0.6	0.5	18.2	28.0	39.6	33.2	
16	Perambur	2,528	11.7	15,492	13,967	29,459	472	466	938	101.3	0.03	1.1	...	0.3	0.6	2.0	4.8	0.4	0.5	12.7	30.5	33.3	31.8	Not available.	Not available.	Not available.
17	Chulalai	230	104.4	12,306	11,715	24,021	429	416	845	103.1	0.04	0.04	...	...	1.2	...	...	9.9	2.2	5.5	0.2	0.6	14.9	34.9	35.5	35.2
18	Purasawakkam	269	76.8	10,475	10,181	20,656	364	346	710	105.2	...	0.05	...	...	1.2	...	...	8.4	2.3	5.4	0.8	1.0	14.4	34.8	34.0	34.4
19	Vepery	450	42.9	10,075	9,224	19,299	381	349	730	109.1	0.2	0.1	0.05	...	2.1	...	0.1	6.2	2.0	9.3	0.5	0.6	17.2	37.8	37.8	37.8	Not available.	Not available.	Not available.
20	Egmore	698	36.7	13,870	11,757	25,627	408	429	837	95.1	...	0.08	0.2	...	0.8	...	0.04	7.2	3.0	5.2	0.4	1.2	15.5	29.4	36.5	32.7			
21	Kilpauk	1,099	16.9	9,667	8,873	18,540	324	289	613	112.1	...	0.05	0.05	...	0.8	...	0.05	6.9	2.3	4.6	0.4	0.3	16.8	33.5	32.6	33.1			
22	Nungambakkam	1,832	11.6	11,036	10,186	21,222	291	307	601	95.8	0.05	0.3	...	0.09	4.5	2.2	6.7	0.4	0.3	13.1	26.6	30.2	28.3	Not available.	Not available.	Not available.
23	Chintadripet	201	118.4	12,259	11,531	23,790	458	424	882	108.0	...	0.2	0.04	...	0.3	...	0.2	7.5	2.3	7.4	0.4	0.6	16.7	37.3	36.8	37.1			
24	Thiuvatteswaranpet	333	72.7	12,556	11,639	24,195	514	487	1,001	105.5	...	0.6	0.09	...	1.5	...	0.2	8.1	2.7	6.8	0.3	0.7	19.4	40.9	41.5	41.4			
25	Chepauk	705	18.8	7,054	6,223	13,277	242	216	458	112.0	0.07	0.2	0.08	...	0.7	...	0.6	4.0	2.6	7.6	0.4	0.7	16.9	34.3	34.8	34.5	Not available.	Not available.	Not available.
26	Triplacane	168	98.2	8,675	7,831	16,506	256	306	562	83.7	...	0.0	0.1	...	1.2	...	0.05	3.9	2.3	6.2	0.7	1.0	16.7	29.4	39.1	34.0			
27	Amir Mahal	169	90.3	7,591	7,663	15,254	321	335	656	95.8	...	0.1	0.07	...	1.7	...	0.2	8.7	3.8	6.7	0.4	0.4	19.1	42.8	43.7	43.2			
28	Mirshahibpet	680	27.4	9,286	9,345	18,631	403	405	808	99.5	0.3	0.4	0.05	...	0.05	...	0.05	7.9	2.3	7.2	0.4	0.3	20.3	43.4	43.4	43.4	Not available.	Not available.	Not available.
29	Royapettah	2,006	10.6	10,875	10,440	21,315	370	364	734	101.6	...	0.08	...	...	1.0	...	0.1	8.4	2.3	4.3	0.3	0.3	14.1	34.1	34.9	34.4	
30	Mylapore	1,525	11.7	9,394	8,454	17,848	272	304	576	89.5	...	0.6	0.2	...	0.1	...	0.06	5.6	1.2	4.6	0.4	0.4	16.3	29.0	35.9	32.3			
Total		18,455	28.5	2,76,107	2,50,804	5,26,911	10,146	9,787	19,933	103.6	0.04	0.2	0.05	0.002	1.5	0.1	1.5	7.2	2.2	6.3	0.4	0.6	17.5	36.7	39.0	37.8	44.8	44.1	46.6

* Includes deaths reported from the Government General Hospital.

Annual Form No. III.—Deaths registered by divisions during each month of the year 1923.

1		2		3			4							
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered during the year.
1	Royapuram	76	81	63	67	74	56	61	63	54	58	79	77	809
2	Tondiarpet	124	92	90	50	72	48	73	58	54	79	75	93	908
3	Washermanpet	117	81	88	52	66	69	71	68	68	71	82	123	963
4	Korukupet	99	59	65	72	40	48	40	53	48	55	56	76	711
5	Harbour	31	26	20	33	23	25	16	26	12	30	26	31	299
6	Muthialpet	29	29	33	31	15	22	22	23	30	29	29	36	328
7	Kachaleswaran Koil	52	43	41	32	27	31	27	33	26	30	49	51	442
8	Kothawal Bazaar	27	16	17	16	18	14	14	13	22	15	23	17	212
9	Ammen Koil	80	66	67	51	45	46	57	55	55	69	63	82	737
10	Seven Welis	93	87	65	80	63	49	63	80	67	73	103	102	925
11	Sowcarpet	22	23	22	17	17	20	27	18	16	25	20	33	260
12	Peddunaickenpet	76	80	79	62	50	43	61	41	52	56	87	92	779
13	Trevelyan Basir	82	55	57	41	55	39	43	47	47	45	69	70	650
14	Esplanade	30	42	36	34	31	26	26	32	35	28	22	34	376
15	Park Town	64	55	55	44	43	35	43	60	43	39	48	54	583
16	Perambur	106	77	74	78	73	71	90	73	61	55	85	95	938
17	Chulai	92	66	73	68	64	70	68	56	62	67	62	97	845
18	Purasawakkam	74	61	57	54	58	43	62	47	43	62	78	71	710
19	Vepery	68	66	72	65	57	41	64	50	52	47	71	77	730
20	Egmore	87	88	75	61	54	45	76	57	54	59	55	96	837
21	Kilpauk	63	54	52	42	38	50	40	54	51	54	59	56	613
22	Nungambakkam	63	52	59	53	56	39	35	60	41	42	49	52	601
23	Chintadripet	101	78	98	89	64	72	67	71	50	45	68	79	882
24	Tiruvatteswaranpet	103	99	34	65	75	63	84	75	66	82	83	112	1,001
25	Chepauk	51	37	43	36	40	40	33	36	27	28	34	53	1,458
26	Triplacane	59	48	43	40	38	51	59	32	43	42	42	65	562
27	Amir Mahal	54	62	65	52	42	57	48	40	55	60	45	76	656
28	Mirshibpet	85	72	74	77	73	74	44	60	58	51	67	73	808
29	Rayapettah	68	67	65	57	63	53	67	47	57	67	58	65	734
30	Mylapore	56	76	49	44	49	37	37	45	44	39	49	51	576
Total		2,132	1,838	1,791	1,570	1,484	1,377	1,518	1,473	1,393	1,502	1,766	2,089	19,933

Annual Form No. IV.—Deaths registered according to age by divisions during the year 1923.

Divisions.	Districts.	3		4		5		6		7		8		9		10		11		12	
		Under 1 year.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Rayapuram	148	156	57	82	12	11	11	8	6	3	30	29	24	28	22	17	20	18	56	71
2	Tondiarpet	141	104	71	72	17	18	9	10	6	18	50	43	44	37	56	17	43	28	65	59
3	Washermenpet	188	142	83	109	30	22	9	6	7	14	27	35	27	43	23	18	20	15	78	67
4	Korukupet	109	85	56	71	21	14	6	9	9	14	17	26	28	23	24	14	31	18	79	57
5	Harbour	40	41	16	25	5	8	3	6	1	8	14	13	24	10	7	8	15	5	25	25
6	Muthialpet	53	38	17	19	4	5	2	6	3	10	16	19	11	15	15	15	14	9	25	32
7	Kachaleswaranpet	85	61	28	30	8	3	4	5	7	7	19	13	19	17	15	15	22	11	36	37
8	Kothawal Bazaar	25	26	13	13	7	2	4	2	4	3	11	5	12	7	16	5	11	9	15	22
9	Ammen Koil	107	92	46	53	12	25	5	5	6	16	25	35	33	38	31	18	38	23	62	67
10	Seven Wells	119	75	43	50	15	13	7	4	8	19	56	51	50	50	55	39	40	37	86	103
11	Sowcarpet	34	27	13	13	3	5	3	3	1	5	9	17	3	10	14	11	13	13	28	35
12	Peddunaickuypet	129	103	54	60	9	21	6	9	9	18	30	48	26	26	23	17	25	24	71	72
13	Trevelyan Basin	95	90	45	61	10	13	5	9	9	13	26	32	16	22	32	16	17	21	60	58
14	Esplanade	12	9	8	6	9	1	9	6	11	7	54	21	51	15	53	13	33	13	35	10
15	Park Town	72	93	40	39	8	13	5	11	3	10	16	26	26	27	14	16	26	17	58	63
16	Perambur	121	125	108	110	19	14	15	9	5	16	30	43	42	28	20	18	23	18	89	85
17	Chulai	141	131	94	89	16	13	7	11	4	16	25	37	19	26	26	17	29	12	68	64
18	Purasawakkam	97	104	83	61	17	13	9	11	3	12	27	27	17	21	26	18	18	20	67	59
19	Vepery	118	96	63	59	20	18	9	6	10	19	25	38	28	27	18	7	27	21	63	58
20	Egmore	159	139	59	68	12	9	7	9	9	15	20	38	32	33	26	24	20	23	64	71
21	Kilpauk	100	75	50	44	11	9	5	9	5	6	27	24	30	32	20	16	22	14	54	60
22	Nungambakkam	89	81	51	56	10	10	6	7	9	16	20	30	15	26	16	18	20	13	58	50
23	Chintadripet	164	116	66	84	12	9	6	3	18	19	28	35	30	28	32	21	37	31	65	78
24	Tiruvattieswaranpet	166	141	84	73	12	12	10	6	8	23	41	41	35	32	32	25	29	18	97	116
25	Chepauk	93	53	31	31	6	3	4	7	2	5	21	34	18	8	16	10	11	11	40	54
26	Triplicane	86	74	45	60	6	8	4	3	6	6	13	31	13	26	14	17	24	21	45	60
27	Amir Mahal	94	100	59	57	10	10	6	4	6	14	15	39	29	18	33	21	19	13	50	59
28	Mirsabibpet	143	119	77	77	19	12	8	14	7	13	19	32	27	22	23	26	19	21	61	69
29	Rayapettah	132	108	56	67	8	13	5	9	10	9	30	30	24	19	24	19	26	17	55	73
30	Mylapore	84	89	58	59	14	17	10	4	5	9	10	24	13	17	15	12	16	23	47	50
Total		3,144	2,693	1,574	1,698	362	344	201	208	197	363	751	916	766	731	741	508	708	537	1,702	1,789
Ratio per 1000		266.7	240.0	77.9	81.8	12.8	12.1	7.3	8.7	7.9	14.4	12.6	16.8	16.5	19.2	22.8	19.4	37.6	33.8	129.8	156.3

In the case of children under one year of age, the ratios are calculated on the number of live-births during the year, in all other cases on the number living at the time of the census of 1921.

Annual Form No. V.—Deaths registered according to class by divisions during the year 1923.

1		2		3		4		5							
		Districts.		Population (according to Census of 1921.)		Number of deaths registered.		Ratio of deaths per 1,000 of population.							
Divisions.		Christians.	Hindus.	Mahomedans.	Others.	Total.	Christians.	Hindus.	Mahomedans.	Others.	Total.				
1	Royapuram	5,612	14,266	896	117	20,891	178	582	49	...	809	31.7	40.1	54.7	37.7
2	Tondiarpet	363	15,183	1,346	7	16,899	25	772	111	...	908	68.9	50.8	82.5	53.7
3	Washermanpet	1,197	21,184	1,427	5	23,777	27	880	56	...	963	22.5	41.6	39.2	40.5
4	Korukupet	377	13,844	2,395	24	16,640	4	590	117	...	711	10.6	42.5	48.9	37.2
5	Harbour	355	3,875	2,954	104	7,288	2	107	189	1	299	5.6	27.6	64.0	40.1
6	Muthialpet	1,103	12,349	2,179	...	15,631	2	299	27	...	328	1.8	24.2	72.4	21.0
7	Katchaleswararpet	1,859	10,259	879	58	13,055	43	384	15	...	442	23.1	37.4	17.1	33.9
8	Kothawal Bazaar	190	3,943	951	33	5,117	5	189	17	...	212	26.3	47.9	17.9	41.4
9	Amnen Kovil	1,977	11,149	2,627	67	15,820	68	511	158	...	737	34.4	45.8	60.2	46.6
10	Seven Wells	1,413	17,207	931	80	19,628	52	811	62	...	925	36.7	47.1	66.6	47.1
11	Sowcarpet	10	7,058	31	353	7,460	...	259	1	...	260	...	36.7	24.0	34.9
12	Peddunaickenpet	30	17,261	247	37	17,575	1	770	8	...	779	33.3	44.6	32.6	44.3
13	Trevelyan Basin	23	17,032	112	165	17,272	3	645	2	...	650	130.5	37.9	17.9	37.7
14	Esplanade	12	2,480	100	72	2,664	39	318	19	...	376	32.8	161.4	190.0	141.0
15	Park Town	851	16,372	262	59	17,544	21	530	2	...	583	24.7	34.2	7.6	33.2
16	Perambur	1,085	22,557	5,722	95	29,459	24	727	187	...	938	22.1	32.2	32.6	31.8
17	Chulai	1,410	22,167	437	7	24,021	29	793	23	...	845	20.6	35.8	52.6	35.2
18	Purasawalkam	3,088	17,146	382	40	20,656	106	594	10	...	710	34.3	34.7	26.2	34.4
19	Vepary	3,584	14,245	1,408	62	19,299	114	564	52	...	730	29.0	39.6	36.9	37.8
20	Egmore	4,582	18,682	2,238	125	25,627	135	623	79	...	837	29.5	33.4	35.3	52.7
21	Kilpauk	2,504	15,584	471	31	18,540	46	546	21	...	613	18.4	35.2	44.6	33.1
22	Nungambakam	3,027	16,594	1,470	131	21,222	54	496	50	1	601	19.8	29.9	34.0	28.3
23	Chintadripet	2,011	20,726	990	63	23,790	59	783	40	...	882	29.3	37.8	40.4	37.1
24	Tiruvatteswararpet	776	15,249	8,115	55	24,195	21	569	41	...	1,001	27.1	37.4	50.8	41.4
25	Chepank	412	9,861	3,004	...	13,277	1	316	141	...	458	2.4	32.1	46.9	34.5
26	Tripligane	50	16,060	388	13	16,503	...	540	22	...	562	...	33.6	57.4	34.0
27	Amir Mahal	536	8,956	5,752	10	15,254	9	382	265	...	656	168	37.2	46.1	43.2
28	Mirshahibpet	1,146	13,988	3,452	45	18,631	23	599	186	...	803	20.0	42.8	53.9	43.4
29	Royapettah	1,885	17,893	1,464	73	21,315	52	626	55	1	734	27.6	35.0	37.6	34.4
30	Mylapore	2,671	14,640	528	19	17,858	74	489	13	...	576	7.1	33.4	24.6	32.3
Total		44,136	4,27,722	53,163	1,890	5,26,911	1,217	16,324	2,388	4	19,933	27.4	38.2	44.9	37.9

* Includes Deaths reported from the Government General Hospital.

Annual Form No. VI --Deaths registered from "Cholera" by Divisions during each month of the year 1923.

1	2	3			4			5	6											
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.		Mean ratio per 1,000 during previous 5 years.	
														Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	3	1	2	3	0.1	0.2	0.1	Not available.
2	Tondiarpet	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
3	Washermanpet	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	0.08	0.04
4	Korukupet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	Harbour	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	Muthialpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	Kachaleeswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Kothawal Bazaar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	Ammen Kovil	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	0.1	..	0.05
10	Seven Wells	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	Sowcarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	Peddunaickenpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	Trevolyan Basin	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	0.9	0.4
14	Esplanade	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	0.1	0.05
15	Park Town	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	0.07	0.03
16	Perambur	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	0.08	0.04
17	Chulai	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..
18	Purasawakam	..	..	..	..	..	..	..	..	1	..	..	..	2	..	1	0.2	0.1	0.2
19	Vepery	..	2	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..
20	Egmore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	Kilpauk	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	0.1	..	0.05
22	Nungambakam	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	0.1	0.05
23	Chintadripet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	Tiruvateswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	Chepauk	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	0.1	..	0.07
26	Triplicane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	Amir Mahal	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
28	Mirsahibpet	..	1	..	..	..	..	..	3	..	..	..	..	3	3	6	0.3	0.3	0.3
29	Royapettah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	Mylapore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	3	1	1	6	3	2	..	5	9	12	21	0.03	0.05	0.04	0.5

Annual Form No. VII.—Deaths registered from ‘Small-pox’ by Divisions during each Month of the year 1923.

1	2	3			4			5		6										
Divisions.	District.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population		Mean ratio per 1,000 during previous 5 years.	
														Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	..	..	3	4	..	..	1	1	1	..	..	..	5	5	10	0.5	0.5	Not available.	
2	Tondiarpet	..	..	2	..	..	..	1	..	..	..	..	..	7	1	8	0.8	0.1		
3	Washermanpet	9	7	11	7	2	2	1	..	1	..	..	..	18	22	40	1.7	1.8		
4	Korukupet	4	5	6	4	1	..	..	..	..	..	..	..	9	11	20	1.0	1.3		
5	Harbour	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	0.4		0.1
6	Muthialpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
7	Kachaleeswaranpet	1	1	..	1	..	..	..	..	..	..	..	..	1	2	3	0.1	0.2		..
8	Kothawal Bazaar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
9	Annen Kovil	..	..	2	2	1	1	4	..	..	..	..	..	3	7	10	0.4	0.9		0.6
10	Seven Wells	3	1	..	1	..	..	..	..	..	..	..	..	4	1	5	0.4	0.1		0.3
11	Sowcarpet	..	..	..	..	..	..	..	..	..	..	1	..	..	..	13	0.4	0.9		..
12	Peddunaickenpet	3	1	5	2	1	..	..	..	..	..	..	..	5	8	..	..	0.7		..
13	Trevelyan Basin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
14	Esplanade	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
15	Park Town	..	1	1	..	..	..	..	..	..	..	..	..	2	..	2	0.2	..		0.1
16	Perambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
17	Chulai	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	0.07	..		0.04
18	Purasawakam	..	..	..	1	..	..	..	..	..	..	..	..	1	1	2	0.09	..		0.05
19	Vepery	1	1	..	..	..	..	..	1	..	..	..	..	2	2	4	0.2	..		0.1
20	Egmore	1	..	..	..	..	..	..	..	..	..	..	..	2	2	4	0.2	..		0.08
21	Kilpauk	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2	0.1	..		0.05
22	Nungambakam	..	1	1	1	..	..	..	..	..	..	..	..	1	1	2	0.09	0.09		0.07
23	Chintadripet	..	2	1	1	..	..	..	..	..	..	..	..	3	1	4	0.2	0.09		0.2
24	Tiruvatteswaranpet	..	..	..	..	..	..	..	2	..	..	1	1	2	2	4	0.2	..		0.06
25	Chepauk	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	0.1	0.2		0.2
26	Triplicane	..	..	..	..	..	..	..	2	..	..	1	..	1	1	2	0.1	0.1		0.05
27	Anir Mahal	..	..	1	1	..	..	..	..	..	..	1	..	2	3	7	0.3	0.3		0.1
28	Mirshahibpet	1	..	1	2	1	..	..	..	..	..	..	..	4	3	7	0.4	0.3		0.4
29	Royapettah	1	..	..	..	..	1	..	..	..	..	..	..	2	2	4	0.2	0.2		0.08
30	Mylapore	3	..	3	1	..	1	1	..	1	..	..	..	5	5	10	0.5	0.6		0.6
Total		29	23	38	28	6	5	9	6	3	..	3	1	81	70	151	0.3	0.3	0.3	

Division.	District.	3												4		5		Mean ratio per 1,000 during previous 5 years.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.		Ratio per 1,000 of Population.		
														Males.	Females.	Total.	Males.		Females.	Total.
1	Royapuram	1	6	4	3	0.4	0.4	Not available.
2	Tondiarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	1	...	0.08	...
19	Vepery	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	0.1
20	Egmore	1	1	2	...	...	...	...	...	...	...	...	...	...	4	0.2	0.1
21	Kilpauk	...	...	...	...	...	...	1	...	...	...	...	...	3	1	...	0.1
23	Chintadripet	...	1	...	...	...	...	...	...	...	...	...	1	...	1	0.08	...
24	Tiruvateswarapuram	...	...	1	...	...	...	...	1	...	...	...	...	...	2	...	0.2
25	Chepauk	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
26	Triplicane	...	...	...	...	1	...	...	...	...	...	...	...	1	1	0.1	...
27	Amir Mahal	...	...	...	1	...	...	...	...	...	...	...	...	1	...	0.1	...
28	Mirshabpet	...	...	...	...	...	...	...	...	...	...	...	...	1	...	0.1	...
30	Mylapore	...	2	1	...	...	...	...	...	...	...	...	...	2	1	0.2	0.1
	Total	2	4	5	2	1	1	2	1	1	6	15	10	0.05	0.04	0.2

(N. B.) No death from measles was registered in Divisions 4 to 18, 22 & 29.

Annual Form No. IX.—Deaths registered from "Plague" by divisions during each month of the year 1923.

1	2	3												4		5		6		
		Districts.												Total.		Ratio of deaths per 1,000 of population.				
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.				
18	Trevelyan Basin	1	...	0.1	...	Not available
	Total ..	1	1	...	0.002	0.06	

(N. B.) No death from Plague was registered in other Municipal divisions.

(N. B.) No death from Plague was registered in other Municipal divisions.

Annual Form No. X.—Deaths registered from “Malaria” by divisions during each month of the year 1923.

1	2	3												4		5		6	
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.		Mean ratio per 1,000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	
1	Royapuram	5	...	4	4	2	3	6	8	5	5	...	5	26	21	47	2.2	2.0	2.3
2	Tondiarpet	8	4	2	1	5	3	3	4	1	1	5	5	23	19	42	2.7	2.3	2.5
3	Washermenpet	3	5	10	6	2	2	4	3	6	7	4	9	27	34	61	2.3	2.9	2.6
4	Korukupet	6	5	4	4	7	7	4	3	4	4	4	10	32	33	65	3.7	4.1	3.9
5	Harbour	...	1	...	...	...	...	2	...	...	1	...	...	3	3	6	0.6	1.3	0.8
6	Muthialpet	...	...	...	...	...	...	2	1	...	...	...	2	7	3	10	0.7	0.5	0.7
7	Katchaleswararpet.	...	...	...	...	...	...	...	...	1	...	...	2	6	1	7	0.8	0.2	0.5
8	Kothawal Bazaar	...	...	...	...	...	...	3	1	...	...	...	...	11	5	16	3.5	2.5	3.2
9	Amman Koil	7	6	4	8	5	3	5	3	4	...	1	...	34	27	61	4.2	3.5	3.9
10	Seven Wells	2	2	7	1	1	5	1	1	2	2	8	5	16	21	37	1.6	2.1	1.9
11	Sowcarpet	...	2	2	3	...	...	3	2	2	...	...	10	22	8	13	1.2	2.5	1.7
12	Peddunaickenpet	...	2	1	3	...	...	2	2	6	4	...	...	17	21	43	2.5	2.4	2.7
13	Trevelyan Basin	8	2	...	...	3	2	2	3	5	6	9	4	17	29	46	2.0	3.4	2.4
14	Esplanade	2	2	1	4	1	2	1	...	...	2	...	...	8	3	11	5.2	2.7	4.1
15	Park Town	5	2	3	1	3	4	2	6	4	2	7	4	20	26	46	2.1	3.7	2.6
16	Perambur	5	2	3	1	3	3	1	1	3	2	2	4	13	13	28	0.8	1.4	1.1
17	Chulai	4	4	1	4	1	2	2	1	1	3	1	6	13	11	24	1.2	1.3	1.2
18	Purasawakam	3	2	...	3	1	4	4	1	2	1	4	3	15	25	41	1.6	2.7	2.1
19	Vepery	...	2	4	5	3	4	4	3	...	6	2	3	2	8	5	0.1	0.3	0.8
20	Egmore	...	2	...	1	...	...	...	...	...	...	...	...	5	9	14	0.5	1.0	0.8
21	Kilpauk	1	...	1	...	3	2	1	...	2	1	2	1	6	1	7	0.5	1.0	0.3
22	Nungambakam	...	2	1	...	...	...	...	1	1	...	...	...	5	1	6	0.4	0.09	0.3
23	Chintadripet	1	...	3	2	...	...	...	...	...	3	...	4	20	16	36	1.6	1.4	1.5
24	Tiruvateswararpet	5	4	8	2	1	4	1	2	...	...	2	...	3	6	9	0.4	1.0	0.7
25	Chepauk	...	1	1	3	...	...	...	1	...	...	1	1	6	13	19	0.7	1.7	1.2
26	Triplicane	...	3	1	...	...	...	2	2	2	...	4	2	16	10	26	2.1	1.3	1.7
27	Amir Mahal	3	6	3	4	...	1	4	...	2	...	1	1	1	...	1	0.1	...	0.05
28	Mirshahpet	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1.1	...	1.0
29	Rayapettah	...	1	2	4	3	4	...	1	...	...	...	1	12	10	22	0.1	0.1	0.1
30	Mylapore	...	...	...	...	...	...	...	...	...	1	1	...	1	1	2	0.1	0.1	0.1
Total		87	63	71	76	50	58	62	50	52	52	74	83	389	394	783	1.4	1.6	1.5
		Not available.																	1.4

Annual Form No. XI.—Deaths registered from “Enteric Fever” by divisions during each month of the year 1923.

1	2	Divisions.	3												4			5			6
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population,			
															Males.	Females.	Total.	Males.	Females.	To tal.	
1	Royapuram	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.08
2	Tondiarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Washermanpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	Korukupet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	Harbour	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	Muthialpet	..	..	1	..	..	..	..	1	..	..	..	..	..	..	2	..	0.2	..	0.1	..
7	Katchaleswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	0.08	..
8	Kothawal Bazaar	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	0.2	0.1	0.1	..
9	Amman Koil	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	0.2	..	..	..	..
10	Seven Wells	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	Sowcarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	Pedūnaiickenpet	..	..	..	2	..	..	..	..	..	..	1	..	..	..	1	..	0.1	0.1	0.1	..
13	Trevelyan Basin	..	1	..	2	..	..	..	2	..	..	..	..	..	..	6	..	3.9	0.9	2.6	..
14	Esplanade	..	1	..	2	..	..	..	..	..	..	..	..	..	..	3	..	0.3	0.4	0.3	..
15	Park Town	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	0.07	0.3	..
16	Perambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	Chulai	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	Purasawakam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	Vepery	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
20	Egmore	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
21	Kilpauk	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	0.1	0.08	0.04	..
22	Nunganbakam	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	0.2	..	0.05	..
23	Chintadripet	..	1	..	1	..	..	..	..	..	..	..	..	..	..	3	..	0.2	..	0.09	..
24	Tiruvateswaranpet.	1	..	..	1	..	..	..	..	1	..	..	..	..	..	2	..	0.2	0.5	0.2	..
25	Chepauk	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	0.1	0.06	..
26	Triplicane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3	0.2	0.2	..
27	Amir Mahal	..	..	..	3	..	..	..	..	..	..	..	..	..	..	2	..	0.3	0.1	0.2	..
28	Mirshibpet	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	0.1	0.1	0.5	..
29	Rayapettab	1	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	0.2	0.1	0.1	..
30	Mylapore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	0.1	..	0.06	..
Total ..		5	3	1	9	4	3	2	6	5	4	2	7	30	21	51	0.1	0.08	0.1	0.1	0.1

Not available.

(N.B.)—No death from ‘Enteric Fever’ was registered in Dns 2 to 5, 8, 12, 17, and 18.

Annual Form No. XII.—Deaths registered from "Other fevers" by divisions during each month of the year 1923.

1	2	3	4	5	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Ratio of deaths per 1000 of Population.			Mean ratio per 1,000 during previous 5 years.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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1	Royapuram

Annual Form No. XIII.—Deaths registered from “Dysentery and Diarrhoea” by divisions during each month of the year 1923.

1	2	3												4		5		6	
Divisions.	Districts.	January,	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Total.		Ratio of deaths per 1,000 of population.		Mean ratio per 1,000 during previous 5 years.	
														Males.	Females.	Total.			
1	Royapuram	15	25	12	19	20	14	19	17	14	9	16	24	84	120	204	8.1	11.4	9.8
2	Tondiarpet	31	22	16	12	14	5	19	17	16	10	11	23	101	103	204	11.8	12.3	12.1
3	Washermanpet	22	22	16	10	15	10	11	16	8	8	16	32	104	82	186	8.7	7.0	7.8
4	Korukupet	23	9	12	14	2	7	9	10	9	8	10	22	68	67	135	7.8	8.4	8.1
5	Harbour	8	5	4	7	5	3	2	2	1	2	3	5	28	19	47	5.6	8.4	6.4
6	Muthialpet	1	6	2	4	6	3	...	4	...	2	4	2	12	22	34	1.2	3.7	2.2
7	Katchaleswaranpet	5	7	6	2	5	8	...	8	...	2	2	5	32	27	59	4.5	4.5	4.5
8	Kothawal Bazaar	4	3	5	1	2	2	...	2	...	2	2	5	19	10	29	6.1	5.0	5.7
9	Amnen Kovil	12	11	8	9	10	11	9	10	11	9	6	12	63	55	118	7.7	7.1	7.5
10	Seven Wells	18	26	9	18	9	3	6	13	12	13	18	22	83	84	167	8.5	8.5	8.5
11	Sowcarpet	2	2	...	...	1	1	1	2	...	2	1	6	12	6	18	2.8	1.9	2.4
12	Peddunackanpet	13	15	7	8	9	11	15	5	7	7	12	21	63	67	130	7.0	7.8	7.4
13	Trevelyan Basin	13	12	12	7	8	6	10	10	3	5	7	11	52	52	104	5.9	6.1	6.0
14	Esplanade	3	2	2	2	2	4	...	4	3	...	3	2	19	8	27	12.3	7.2	10.1
15	Park Town	11	3	6	1	2	7	4	5	1	1	1	3	17	28	45	1.8	3.5	2.6
16	Perambur	28	30	28	27	22	18	28	27	20	19	14	28	141	148	289	9.1	10.6	9.8
17	Chulai	30	22	22	21	16	23	17	20	15	16	15	21	125	112	237	10.2	9.6	9.9
18	Purasawalkam	18	17	16	15	18	12	14	14	7	8	16	18	83	90	173	7.9	8.8	8.4
19	Vepery	12	11	8	12	8	10	20	7	5	2	12	13	60	60	120	6.0	6.5	6.2
20	Egmore	22	19	16	14	9	7	21	12	10	10	16	27	85	98	183	6.1	8.3	7.2
21	Kilpauk	10	12	7	11	3	9	5	15	8	11	16	20	60	61	127	6.8	6.9	6.9
22	Nungambakam	10	9	15	8	6	6	4	10	6	5	5	10	35	59	94	3.2	5.8	4.5
23	Chintadripet	22	17	26	11	12	10	18	9	13	7	17	16	89	89	178	7.3	7.7	7.5
24	Tiruvatteswaranpet	13	21	21	17	26	12	18	8	8	12	12	28	102	94	196	8.1	8.1	8.1
25	Chepauk	11	5	6	3	3	5	4	6	1	2	4	4	29	24	53	4.1	3.9	4.0
26	Triplicane	7	8	5	3	1	7	9	5	4	1	6	8	28	36	64	3.2	4.6	3.9
27	Amir Mahal	12	17	14	10	8	15	11	7	9	11	3	16	65	68	133	8.6	7.2	8.7
28	Mirshahibpet	17	18	14	17	11	12	9	7	12	8	13	9	80	67	147	8.6	7.2	7.19
29	Royapettah	15	18	18	14	13	17	14	12	18	9	13	18	94	85	179	8.6	8.1	8.4
30	Mylapore	12	13	13	5	9	6	4	5	8	7	9	7	42	56	98	4.5	6.6	5.6
Total		420	407	346	302	275	263	308	288	238	207	290	434	1831	1897	3778	6.8	7.6	7.2
		...																	9.2

Annual Form No. XIV.—Deaths registered from “Tubercle” including Tubercle of the Lungs by divisions during each month of the year 1923.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.			Mean ratio per 1,000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram	1	8	2	6	3	5	5	1	...	3	3	5	22	20	42	2.1	1.9	2.0	Not available.
2	Tondiarpet	1	8	4	3	4	3	1	2	4	2	2	5	19	17	36	2.2	2.0	2.1	
3	Washermanpet	3	3	4	5	4	7	4	4	2	4	2	5	24	16	45	2.4	1.4	1.5	
4	Korukupet	1	4	1	7	...	4	4	4	5	1	1	5	19	17	36	2.2	2.1	2.2	
5	Harbour	1	2	4	6	...	3	...	3	...	2	1	2	17	8	25	3.4	3.5	3.4	
6	Muthialpet	4	2	3	5	...	2	...	3	...	1	...	1	8	15	23	0.8	2.5	1.5	
7	Kachaleswaranpet	2	5	1	4	1	2	5	2	3	1	4	4	18	16	34	2.5	2.7	2.6	
8	Kothawal Bazaar	1	4	2	1	1	1	...	...	1	1	1	1	6	8	14	1.9	4.0	2.7
9	Annam Koil	10	7	5	3	2	4	...	4	3	6	3	5	28	26	54	3.5	3.4	3.4	
10	Seven Wells	5	10	9	13	7	3	10	10	2	5	10	9	58	35	93	6.0	3.5	4.7	
11	Sowcarpet	3	1	3	...	1	...	1	2	1	...	1	...	4	8	12	0.9	2.5	1.6	
12	Peddunaickenpet	11	5	6	4	5	1	3	3	5	2	4	...	22	31	53	2.5	3.6	3.0	
13	Trevelyan Basin	1	5	7	4	3	2	5	4	1	1	4	3	20	18	38	2.4	2.1	2.2	
14	Esplanade	1	3	2	5	2	4	3	5	1	2	1	5	26	7	33	16.8	6.3	12.4	
15	Park Town	2	2	4	3	5	2	1	3	2	1	2	2	12	17	29	1.3	2.1	1.7	
16	Perambur	4	7	5	2	4	4	6	8	5	2	6	5	25	33	58	1.6	2.4	2.0	
17	Chulai	6	4	5	4	10	5	5	2	2	2	4	5	24	30	54	2.0	2.0	2.2	
18	Purasawakam	6	4	5	4	6	4	5	3	7	5	3	1	30	18	48	2.9	1.8	2.3	
19	Vepery	5	5	2	1	3	4	2	4	5	6	...	3	24	14	38	2.4	1.5	2.0	
20	Egmore	5	5	...	4	6	3	4	1	10	5	3	4	35	15	50	2.5	1.3	2.0	
21	Kilpauk	3	5	...	1	5	2	2	6	6	4	3	4	27	16	43	2.8	1.8	2.3	
22	Nungambakam	7	1	6	4	2	3	1	1	2	3	3	4	18	28	46	1.6	2.7	2.2	
23	Chintadripet	2	2	3	6	5	6	4	5	1	5	8	8	29	26	55	2.4	2.3	2.3	
24	Tiruvatteswaranpet	7	5	8	5	4	5	5	4	4	11	4	4	38	28	66	3.0	2.4	2.7	
25	Chepauk	4	3	6	4	1	2	4	5	...	2	1	2	17	17	34	2.4	2.7	2.6	
26	Tripligan	4	6	2	4	5	...	2	4	5	5	...	1	13	25	38	1.5	3.2	2.3	
27	Amir Mahal	5	1	4	4	4	...	2	...	8	10	8	7	29	29	58	3.8	3.8	3.8	
28	Mirahibpet	5	3	1	2	6	2	5	5	2	4	4	3	16	26	42	1.7	2.8	2.3	
29	Rayapettah	7	2	6	1	5	6	4	2	4	5	1	6	23	16	49	2.1	2.5	2.3	
30	Mylapore	...	2	...	2	2	1	1	4	1	2	4	3	12	10	22	1.3	1.2	1.2	
Total		116	124	110	117	107	89	96	111	89	103	91	115	668	600	1,268	2.4	2.4	2.4	2.2

Not available.

Annual Form No. XV.—Deaths registered from “Respiratory Diseases” excluding Tubercle of the Lungs by divisions during each month of the year 1923.

1	2	- 3			4	5	6												
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.	Mean ratio per 1,000 during previous 5 years.	
														Males.	Females.	Total.			Males.	Females.	Total.
1	Royapuram	11	5	12	4	6	4	4	9	4	8	12	7	41	45	86	3.9	4.3	4.1
2	Tondiarpet	16	9	10	8	6	12	5	8	5	16	8	8	53	48	101	6.2	5.7	6.0
3	Washermenpet	22	11	14	6	13	12	16	10	18	12	11	21	77	89	166	6.4	7.6	7.0
4	Konkumet	14	8	6	9	3	12	6	7	6	9	12	9	52	50	102	6.0	6.3	6.1
5	Harbour	7	8	4	10	2	5	4	9	3	9	5	3	29	40	69	5.8	17.7	9.5
6	Muthialpet	7	6	7	7	4	5	5	4	9	5	8	5	30	40	70	3.1	6.7	4.5
7	Katchaleswaranpet	12	7	7	8	3	5	3	5	7	9	15	12	52	41	93	7.8	6.9	7.1
8	Kothawal Bazaar	3	3	...	2	4	1	3	2	3	6	11	2	23	17	40	7.4	8.5	7.8
9	Ammen Koil	9	6	11	6	5	4	10	5	7	12	12	10	50	47	97	7.2	6.1	6.1
10	Seven Wells	16	7	13	14	13	7	13	11	19	11	20	10	82	72	154	8.4	7.3	7.8
11	Sowcarpet	3	2	6	6	6	7	5	4	1	4	6	8	26	32	58	6.1	10.1	7.8
12	Peddunaickenpet	11	11	17	6	11	8	13	6	7	11	16	11	68	60	128	7.6	7.0	7.3
13	Trevelyan Basin	21	9	13	11	13	9	9	8	11	14	18	11	64	83	147	7.3	9.8	8.5
14	Esplanade	4	6	3	4	2	2	1	2	9	2	2	2	27	12	*39	17.4	10.8	14.7
15	Park Town	11	9	8	7	9	9	9	12	11	7	15	14	63	58	121	6.6	7.3	6.9
16	Perambur	18	7	11	10	12	9	16	9	10	4	18	16	75	65	140	4.2	4.7	4.8
17	Chulai	13	8	9	8	11	14	13	6	7	9	15	20	71	62	133	5.8	5.3	5.5
18	Purasawakam	11	12	13	6	10	6	10	9	4	9	10	11	56	55	111	5.3	5.4	5.4
19	Vepery	22	17	10	16	15	8	14	11	9	10	16	12	78	82	160	7.7	8.9	8.3
20	Egmore	20	14	9	9	4	7	16	16	7	10	12	9	76	57	133	5.5	4.6	5.2
21	Kilpauk	9	11	7	4	7	7	8	9	5	2	6	10	51	35	86	5.3	3.9	4.6
22	Nungambakam	14	11	10	12	9	14	13	14	8	14	9	14	71	71	142	6.4	7.0	6.7
23	Chintadripet	23	19	15	17	13	13	13	13	12	8	15	15	92	84	176	7.5	7.3	7.4
24	Tiruvatteswaranpet	11	15	15	6	16	10	15	12	13	14	19	19	82	83	165	6.5	7.1	6.8
25	Chepauk	11	7	8	3	13	7	5	8	4	9	9	17	51	50	101	6.4	8.0	7.6
26	Triplicane	13	7	6	10	6	10	15	6	10	9	6	14	58	54	112	6.7	6.9	6.2
27	Amir Mahal	7	4	6	10	11	12	8	7	9	10	8	10	46	56	102	6.1	7.3	6.7
28	Mirshabipet	10	5	13	14	17	14	7	18	13	7	11	16	67	68	135	7.2	7.3	7.2
29	Royapettah	13	9	9	9	6	2	13	6	7	5	7	6	43	49	82	4.0	4.7	4.3
30	Mylapore	7	3	6	11	11	5	8	6	9	4	6	7	36	47	83	3.8	5.6	4.6
Total ...		369	256	278	247	262	237	280	242	247	257	338	329	1,690	1,652	3,342	6.6	6.6	6.3
		Not available.																	7.6

Annual Form No. XVI.—Deaths registered from "Injuries" by divisions during each month of the year 1923.

1	2	Districts.	3												4			5			6	
			Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.			
																Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	...	...	1	1	1	...	3	...	2	...	...	...	1	...	5	2	7	0.5	0.2	0.3
2	Tondiarpet	...	1	1	2	...	...	...	...	2	1	...	...	...	...	2	7	9	0.2	0.8	0.5
3	Washermanpet	...	...	...	1	...	...	...	...	2	...	...	...	...	...	3	6	9	0.3	0.5	0.4
4	Korukupet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	0.2	...	0.1
5	Harbour	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	2	5	0.6	0.9	0.7
6	Muthialpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0.1	...	0.06
7	Kachaleeswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	3	0.3	0.2	0.2
8	Kothawal Bazaar	...	1	...	...	...	...	...	...	...	...	...	...	...	...	5	1	5	1.6	...	1.0
9	Amnen Koil	...	...	...	...	...	...	2	...	...	...	...	...	...	...	3	...	4	0.4	0.1	0.3
10	Seven Wells	...	...	...	...	...	...	1	...	...	...	...	...	...	...	11	5	16	1.1	0.5	0.8
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Frevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Esplanade	...	1	...	...	...	...	...	...	...	...	...	...	...	...	13	...	14	8.4	0.9	4.9
15	Park Town	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0.1	0.06
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	11	0.6	0.1	0.4
17	Chulai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	0.2	0.3	0.2
18	Purasawakam	...	2	...	...	...	...	...	...	...	...	...	...	...	...	8	9	17	0.8	0.9	0.8
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	3	9	0.6	0.3	0.5
20	Egmore	...	2	...	...	...	...	...	...	...	...	...	...	...	...	6	5	11	0.4	0.4	0.4
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	7	13	0.6	0.8	0.7
22	Nungambakam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	2	9	0.6	0.2	0.4
23	Chintadripet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	1	9	0.7	0.09	0.4
24	Tiruvateswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	3	8	0.4	0.3	0.3
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	0.6	0.2	0.4
26	Trilpicane	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	5	11	0.7	0.6	0.7
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1	6	0.7	0.1	0.4
28	Mirsahibpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	4	7	0.3	0.4	0.4
29	Rayapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	0.3	0.3	0.3
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	3	7	0.4	0.4	0.4
Total		...	16	21	19	26	18	15	22	24	12	14	13	14	133	81	214	0.5	0.3	0.4	0.4	

Annual Form No. XVII.—Deaths registered from "Child-Birth" by divisions during each month of the year 1923.

1	2	3												4	5	6						
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Females.			Ratio of deaths per 1000 of Population.			Mean ratio per 1,000 during previous 5 years.		
														Total.		Males.	Females.	Total.	Males.		Females.	Total.
														Males.	Females.							
1	Royapuram	...	2	1	2	1	1	5	0.5	...	0.2	Not available.		
2	Tondiarpet	...	2	...	...	1	2	...	...	1	...	...	1	17	...	...	2.0	...	1.0
3	Washermanpet	...	2	...	...	4	...	...	...	...	3	...	1	13	...	...	1.1	...	0.5
4	Korukupet	...	...	...	...	...	2	...	...	...	1	...	...	5	...	...	0.6	...	0.3
5	Harbour	...	...	...	...	1	...	...	...	...	1	...	...	7	...	...	3.1	...	1.0
6	Muthialpet	...	...	...	...	1	1	...	...	...	...	...	...	2	...	...	0.3	...	0.1
7	Kachaleswaranpet	...	...	...	...	2	1	...	...	...	...	...	...	6	...	...	1.0	...	0.5
8	Kothawal Bazaar	...	...	...	...	...	1	...	...	2	...	...	1	5	...	...	2.5	...	0.9
9	Annen Koil	...	2	...	...	1	...	...	...	...	6	...	...	25	...	...	3.2	...	1.6
10	Seven Wells	...	1	...	...	1	...	...	...	...	3	...	...	11	...	...	1.1	...	0.6
11	Sowcarpet	...	1	...	...	1	2	...	...	...	3	...	...	9	...	...	2.8	...	1.2
12	Peddurickenpet	...	2	...	...	...	...	...	...	...	...	...	2	16	...	...	1.9	...	0.9
13	Trevelyan Basin	...	1	...	...	...	...	...	...	...	...	...	...	11	...	...	1.3	...	0.8
14	Esplanade	...	...	...	...	1	...	...	...	...	...	...	...	3	...	...	2.7	...	1.1
15	Park Town	...	...	...	...	1	...	...	...	...	...	...	...	9	...	...	1.1	...	0.5
16	Perambur	...	1	...	...	1	...	...	...	...	1	...	...	14	...	...	1.0	...	0.5
17	Chulai	...	1	...	...	1	1	...	...	...	1	...	...	15	...	...	1.3	...	0.6
18	Purasawakkam	...	...	...	...	...	...	...	...	4	...	...	...	20	...	...	2.0	...	1.0
19	Vepery	...	1	...	...	...	...	...	...	2	...	...	...	11	...	...	1.2	...	0.6
20	Egmore	...	3	...	...	1	...	...	...	4	...	...	...	32	...	...	2.7	...	1.2
21	Kilpauk	...	...	...	...	...	...	...	...	1	...	...	...	7	...	...	0.8	...	0.4
22	Nungambakkam	...	...	...	...	2	...	...	...	...	...	...	...	7	...	...	0.7	...	0.3
23	Chintadripet	...	...	...	...	1	1	...	...	...	1	...	...	14	...	...	1.2	...	0.6
24	Tiruvatteswaranpet	...	3	...	...	...	...	...	...	4	...	...	...	17	...	...	1.5	...	0.7
25	Chepauk	...	...	...	...	1	...	...	...	2	...	...	...	9	...	...	1.5	...	0.7
26	Triplicane	...	1	...	...	2	2	...	...	1	...	...	...	14	...	...	2.2	...	1.0
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	0.8	...	0.4
28	Mirsaibpet	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	0.6	...	0.3
29	Rayapettah	...	...	...	...	1	...	...	...	1	...	...	...	7	...	...	0.7	...	0.3
30	Mylapore	...	1	...	...	...	...	...	...	3	...	...	...	7	...	...	0.8	...	0.4
Total		19	25	24	18	25	16	31	32	29	37	47	27	...	330	330	...	1.3	0.6	...		

Annual Form No. XVIII.—Deaths registered from "Other Causes" by divisions during each month of the year 1923.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of Deaths per 1,000 of Population.			Mean Ratio per 1,000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Rayapuram	39	38	25	23	39	25	22	25	29	32	38	32	180	192	372	17.3	18.3	17.8	Not available.
2	Tondiarpet	54	40	51	30	37	24	40	23	24	43	36	44	270	176	446	31.6	21.0	20.5	
3	Washermenpet	46	26	28	20	25	33	33	29	30	34	41	44	210	179	389	17.5	15.2	16.4	
4	Korukupet	45	26	31	21	22	16	17	24	22	33	25	26	178	130	308	20.5	16.3	18.2	
5	Harbur	12	8	8	5	13	13	6	11	8	12	16	19	69	62	131	13.7	27.5	18.0	
6	Muthialpet	10	12	17	13	5	11	13	11	17	19	12	25	90	75	165	9.3	12.6	10.6	
7	Kachaleswaranpet	28	19	23	12	12	13	11	15	14	14	25	27	118	95	213	16.6	16.0	16.3	
8	Kothawal Bazaar	10	5	8	8	8	8	7	7	9	6	7	12	47	48	95	15.1	24.0	18.6	
9	Ammen Koil	38	34	32	19	20	22	21	30	24	32	28	41	163	173	341	22.0	22.4	21.6	
10	Seven Wells	46	36	26	31	30	28	40	37	29	36	41	46	214	202	416	22.0	20.4	21.1	
11	Sowcarpet	14	14	10	7	8	11	15	7	13	16	11	16	69	73	142	16.1	23.0	19.0	
12	Peddannaickenpet	36	41	39	34	22	19	23	23	25	29	46	39	195	180	375	21.8	20.9	21.3	
13	Trevelyan Basin	36	24	22	14	24	18	17	17	24	19	29	38	148	134	282	16.9	15.7	16.3	
14	Esplanade	17	23	26	17	21	14	13	19	17	19	13	20	164	59	223	105.9	53.8	83.7	
15	Park Town	34	36	31	25	23	13	27	30	23	27	21	30	149	171	320	15.5	21.5	18.2	
16	Perambur	48	26	23	34	28	34	35	23	22	26	39	37	200	175	375	12.9	15.2	12.7	
17	Chulai	37	28	31	29	24	26	28	24	33	34	21	43	184	174	358	15.0	14.9	14.9	
18	Purasawakam	34	18	22	22	22	16	24	15	18	33	41	34	160	139	299	15.3	13.7	14.4	
19	Vepery	22	23	45	29	25	14	20	20	29	32	38	46	186	145	331	18.5	15.7	17.2	
20	Egmore	35	39	41	28	32	26	29	22	22	32	43	49	191	207	398	13.8	17.6	15.5	
21	Kilpauk	37	26	28	20	20	26	22	19	28	36	30	20	164	148	312	17.0	16.7	16.8	
22	Nungambankam.	30	27	25	28	28	14	12	23	21	19	28	23	144	132	278	13.2	12.9	13.1	
23	Chintadripet	46	36	40	39	25	38	30	40	22	21	25	38	210	190	400	17.1	16.5	16.7	
24	Tiruvatteswararnpet	53	48	34	22	28	29	40	42	35	40	35	53	246	223	469	19.6	19.2	19.4	
25	Chepank	23	19	18	20	16	25	17	13	18	12	18	25	126	98	224	17.9	15.7	16.9	
26	Triplicane	31	22	24	16	19	28	25	12	20	21	21	37	133	143	276	15.3	18.3	16.7	
27	Amir Mahal	23	30	31	17	17	23	22	18	25	28	20	37	142	149	291	18.7	19.4	19.1	
28	Mirshabpet	33	36	35	33	36	45	19	35	25	20	25	36	186	192	378	20.0	20.7	20.3	
29	Royappa	26	34	22	23	26	16	27	14	21	36	29	28	150	152	302	13.8	14.6	14.1	
30	Mylapore	26	41	20	20	26	23	19	27	19	18	24	28	146	145	291	15.5	17.1	16.3	
Total		969	835	815	674	681	651	668	655	666	767	826	993	4,839	4,361	9,200	17.8	17.4	17.5	19.3

Annual Form No. XIX.—Comparing the Deaths from some of the principal diseases during the year with the deaths during the preceding 5 years.

Years.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other Fevers.		Dysentery and Diarrhoea.		Tuber- culosis other than Pulmo- nary.)		Respiratory System.				Injuries.		Death from child birth.		All other causes.		Total Deaths.	
																			Tuber- culosis (Pulmo- nary)		Other Res- piratory Diseases.									
	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.
1918	503	1.0	272	0.5	104	0.2	22	0.04	881	1.7	45	0.09	4,792	9.2	5,533	10.7	57	0.1	1,431	2.8	5,578	10.6	177	0.3	...	...	11,927	23.0	31,262	60.3
1919	642	1.2	611	1.2	108	0.2	14	0.03	736	1.2	52	0.1	2,522	4.9	5,835	11.3	131	0.3	1,178	2.3	3,839	7.4	209	0.4	...	...	11,310	21.8	27,187	52.4
1920	22	0.04	109	0.2	41	0.08	8	0.02	560	1.1	66	0.1	1,774	3.4	4,671	9.0	77	0.1	920	1.8	3,431	6.6	296	0.6	...	...	9,443	18.2	21,418	41.3
1921	139	0.3	180	0.3	40	0.08	3	0.006	652	1.2	85	0.2	1,475	2.8	4,149	7.9	52	0.1	905	1.7	3,510	6.7	241	0.5	216	0.4	8,621	16.4	20,268	38.5
1922	17	0.03	1121	2.1	150	0.28	1	0.002	763	1.4	74	0.1	1,325	2.5	4,167	7.9	61	0.1	1,027	1.9	3,823	7.3	181	0.34	293	0.6	9,472	18.0	22,475	42.7
Mean of the last 5 years ...	265	0.5	459	0.9	89	0.2	10	0.02	718	1.4	64	0.1	2,378	4.5	4,871	9.2	76	0.1	1,092	2.1	4,024	7.6	221	0.4	...	...	10,154	19.3	24,522	46.6
1923	21	0.04	151	0.3	25	0.05	1	0.002	783	1.5	51	0.1	769	1.5	3,778	7.2	76	0.1	1,192	2.3	3,342	6.3	214	0.4	330	0.6	9,200	17.5	19,933	37.8

Annual Form No. XX—Showing a Complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.

	No. in the Nomenclature of Diseases.	Causes of Death.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Infective Diseases.	5	Cerebro-Spinal Meningitis	...	...	...	...	1	...	...	...	1	...	...	...	...	2
	6	Chicken-pox	...	...	...	3	...	...	...	...	...	...	...	...	...	3
	7	Cholera	...	...	3	1	1	...	...	...	6	3	2	...	5	21
	10	Diphtheria	...	1	...	...	...	...	2	...	1	1	...	...	...	5
	11	Dysentery	...	263	225	213	162	132	119	130	140	119	110	162	238	2,021
	13	Enteric Fever	...	5	3	1	9	4	3	2	6	5	4	2	7	51
	14	Enteritis	...	157	182	133	140	143	144	178	140	119	97	128	196	1,757
	15	Erysipelas	...	1	2	...	1	1	2	...	...	...	1	1	1	10
	20	Gonorrhoea	...	...	...	...	...	...	...	...	...	...	...	...	1	1
	21	Influenza	...	1	...	1	1	2	1	...	...	1	1	7	4	19
	22	Kala-Azar	...	3	3	6	3	5	3	1	5	9	6	4	4	52
	23	Leprosy	...	13	8	12	9	5	9	9	6	6	7	10	13	107
	25	Malarial Fever	...	72	53	62	67	48	51	49	40	44	48	70	78	682

Annual From No. XX—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.—(Continued.)

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Infective Diseases—contd.	43	Tetanus	...	...	...	...	1	...	...	1	...	...	...	...	2
	44	Tuberculosis (Pulmonary)	...	111	120	104	113	98	82	103	82	93	87	111	1,192
		Tuberculosis other than Pulmonary	...	5	4	6	4	9	7	8	7	10	4	4	76
	47	Whooping Cough	...	...	2	1	2	1	1	4	8	4	6	10	47
			
General Diseases.	61	Anaemia	...	16	14	17	6	11	11	7	10	15	15	6	136
	63	„ Pernicious	...	2	1	1	4	4	3	...	5	2	3	4	30
		„ and Dropsy	...	6	6	9	6	4	4	3	7	3	3	1	52
	65	Cretinism	...	...	...	...	...	...	...	...	...	...	1	...	1
	66	Diabetes	...	1	4	2	2	2	6	3	1	3	4	2	34
		Diabetic Carbuncle	...	...	3	...	...	4	4	2	...	3	3	1	20
		„ Coma	...	...	1	...	...	1	3	1	1	1	...	...	9
		„ Gangrene	...	...	...	...	...	1	...	...	...	...	...	...	1
	76	Rickets	...	3	3	1	3	...	2	2	4	...	3	6	29
			
			
			

78 Malformation :—B—Incomplete development affecting the several Organs &c.,

Fissure of Palate	...	...	...	...	...	...	...	1	1	...	...	...	3
Tumour in the Abdomen	...	...	...	3	6	...	...	3	2	...	5	1	25
Sarcoma	...	...	...	...	1	1	...	1	...	...	3	...	6
Cancer	4	2	4	2	5	6	4	1	3	2	40

82 Effects of Parasites.

NEMATODA.

(79) Ankylostomum	3	5	2	...	2	1	2	1	4	4	2	26
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85 Effects of Poisons.

ACID AND ACID SALTS.

(4) Nitric Acid	1	1
(8) Sulphuric Acid	1	1

ANIMAL POISON.

(a) Snake-bite	...	...	1	...	...	...	1	...	2	...	1	...	...	5
(b) Scorpion-Sting	...	...	1	...	...	1	...	...	...	...	...	...	...	2

Annual Form No. XX—showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.—(Continued.)

Diseases of the Nervous System.															
No. in the Nomenclature of Diseases.	Causes of Death.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Spinal Cord and Membranes.															
MEMBRANES.															
88	Meningitis	... ..	3	4	2	1	2	3	3	2	2	...	2	1	25
SPINAL CORD.															
90	Myelitis	... ..	...	...	...	...	...	...	1	...	...	...	...	...	1
94	(a) Degeneration of Anterior Cornua	... ..	...	...	...	...	...	...	...	...	1	...	...	...	1
Diseases of the Brain & its Membranes.															
BRAIN.															
101	Cerebral Haemorrhage	... ..	3	5	6	3	4	5	1	...	3	1	3	6	40
109	Apoplexy	... ..	1	...	...	...	2	...	3	..	...	2	...	3	11
110	Paralysis	... ..	15	7	10	5	3	3	10	7	12	10	11	10	103
	" (a) Paraplegia	... ..	2	1	5	2	2	...	..	2	2	...	2	2	20
	" (b) Hemiplegia	... ..	22	14	21	8	18	7	21	9	20	14	10	14	178

Diseases of the Nervous System—Contd.																	
115	Chorea	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
123	Eclampsia (Convulsions),	...	...	...	159	127	136	104	108	107	107	111	118	151	166	176	1,570
	" Puerperal	...	...	...	1	2	7	2	9	7	5	5	3	5	15	5	66
124	Epilepsy	...	...	...	2	...	...	1	...	...	2	1	1	1	1	1	10
133	Hysteria	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	2
143	Neurasthenia	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2
II. DISEASES OF FUNCTION.																	
145	Mania	...	...	...	...	1	...	1	...	2	1	1	...	1	...	...	7
DISORDERS OF THE EYE.																	
166	Conjunctivitis	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Diseases of the Nose.																	
280	Epistaxis	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
DISEASES OF THE HEART.																	
DISEASES OF THE ENDOCARDIUM.																	
292	Endocarditis	...	...	...	1	1	...	...	1	...	1	...	2	...	...	...	6
293	Valvular Disease	...	...	...	11	8	6	3	10	7	7	7	10	10	9	7	95
	Cardiac Failure	...	...	...	6	5	3	4	2	5	5	5	4	5	3	4	51
	Cardiac Dropsy	...	...	...	3	4	...	4	1	4	3	1	...	2	1	...	23
	Diseases to the Heart (Not specified)	...	...	...	14	13	16	25	11	19	16	20	15	15	18	18	200
Diseases of the Circulatory system.																	

Diseases of the Circulatory system.

Annual Form No. XX--Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.--(Continued.)

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Circulatory System (Contd.)		DISEASES OF THE MYOCARDIUM.													
	492	Myocarditis ... ...	...	1	1	...	1	...	...	2	...	1	...	...	6
	298	Dilatation of the Heart ... ...	...	2	1	2	2	...	1	4	...	...	...	...	12
	302	Angina Pectoris 	1	..	...	1	...	...	...	...	...	...	...	...	2
Diseases of the Respiratory System.		Diseases of the Respiratory System. (Not strictly Local)													
		Diseases of the Larynx.													
	339	Laryngitis ... ...	...	...	...	...	...	...	...	1	...	...	...	...	1
	338	Asthma 	13	10	12	2	2	7	11	4	7	7	4	10	89
		Diseases of the Trachea and Bronchi													
	404	Bronchitis (Acute) 	12	8	16	6	8	5	6	7	8	8	8	10	102
		" Chronic 	17	10	12	5	8	3	7	4	4	7	11	12	100
		" a Catarrhal ... ...	...	...	...	...	...	...	...	...	...	...	...	1	1

Diseases of the Digestive System.

Annual from No. XX.—Showing a complete classification of Disease arranged in the order adopted in the Nomenclature of Diseases.—(Continued)

No. in the Nomenclature of Diseases.	Causes of Death.	Diseases of the Digestive System.—(Contd.)												Total.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
491	Gangrene	...	1	2	...	4	...	2	1	1	2	...	...	13
492	Haematemesis	...	...	1	...	...	...	...	...	...	...	...	...	1
499	Dyspepsia	...	5	3	4	4	2	2	3	2	1	4	10	45
515	Inflammation:—													
	(2) Appendicitis	...	1	2	2	...	2	2	1	1	...	...	3	15
	Gastro-Enteritis	...	2	3	1	2	4	1	2	...	2	1	...	19
	(3) Colitis	...	...	2	...	...	2	1	...	...	...	3	9	17
526	Sprue	...	...	...	1	...	...	...	...	...	...	...	...	1
528	Hernia	...	...	1	2	...	1	2	1	1	2	1	...	11
	Strangulated	...	6	2	...	1	4	2	4	1	1	4	3	31
530	Intussusception	...	...	...	...	1	...	1	...	...	...	...	...	2
536	Obstruction of Bowels	...	9	8	7	8	2	6	6	5	7	7	3	73

539	Intestinal catarrh	...	...	2	2	2	...	1	...	1	...	1	2	11
544	Colic	...	...	...	2	2	...	...	...	...	...	...	...	2
Diseases of the Rectum and Anus.														
549	Fissure of Anus	...	...	...	1	1	...	...	...	1	1	1	2	7
556	Piles	...	...	4	3	2	2	...	...	...	1	2	3	17
557	Prolapse	...	...	...	...	...	...	...	...	...	...	1	...	1
Diseases of the Liver.														
568	Hepatitis	...	...	3	3	1	3	4	...	4	...	2	6	31
	(b) Cirrhosis of Liver	...	...	7	17	12	11	5	15	7	9	6	12	124
569	Enlargement of Liver	...	...	...	1	1	1	2	3	...	2	1	2	13
571	Congestion of Liver	...	...	1	...	...	...	...	...	...	...	...	1	2
573	Atrophy	...	...	...	...	...	...	...	...	1	...	...	...	1
575	Jaundice	...	...	6	...	3	2	2	6	9	5	3	5	50
Diseases of the Gall Bladder and Ducts.														
581	Gall stones	...	...	...	...	...	...	...	1	...	...	...	1	2
Diseases of the Peritonium.														
588	Peritonitis	...	...	3	2	4	4	5	4	2	2	2	4	36
590	Ascitis	...	...	24	15	20	17	16	14	15	9	14	16	199

Annual Form No. XX—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases —(Continued).

No. in the Nomenclature of Diseases.	Causes of Death.	Diseases of the Lymphatic System.												Total.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
592	Enlargement of the Spleen	...	1	1	2	1	...	3	...	4	1	3	4	20
603	Rupture Spleen	...	...	...	...	...	1	...	...	1	..	...	1	3
615	Filariasis	...	1	...	...	...	...	...	...	1	2	...	...	4
616	Lymphangitis	...	1	...	...	...	...	...	...	...	...	...	...	1
618	Elephantiasis of the Scrotum	...	1	...	...	...	...	1	...	...	...	...	...	2
	Elephantiasis of the Leg.	1	...	...	...	...	...	...	...	...	...	...	...	1
651	Nephritis Acute	2	6	5	6	4	2	6	1	6	2	8	7	55
	Renal Dropsy	7	10	5	8	8	6	7	2	2	4	2	4	65
652	Bright's Disease	2	4	6	3	4	9	5	7	6	6	8	17	77
	Sub. Divisions	...	...	...	...	...	...	...	...	...	...	...	...	...
	(1) Chronic Nephritis	3	9	3	6	8	5	4	2	5	4	6	1	56

Diseases of the Urinary System—(Contd.)

655 Pyelitis

Diseases of the Bladder.

678

Ulceration of the Bladder

689

Retention of urine

Urinary Disorders.

692

Suppression of urine

697

Albuminuria

Uraemia Coma

Diseases of the Male Organs of Generation.

Diseases of the Urethra.

711

Haemorrhage

712

Stricture of Urethra

715

Extravasation of Urine

Diseases of the Scrotum.

741

Cellulitis Scrotum

742

Sloughing Scrotum

Diseases of the Female organs of generation:—

Diseases of the Fallopian Tube.

773

Distention (b) Pycosalpinx

1

1

7

4

7

8

4

3

3

3

1

1

Annual Form No. XX.—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.—(Continued)

	No. of the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Generative System—(Contd.)		Diseases of the Uterine Ligaments, and of the Adjacent Peritoneum and Connective Tissue.													
	783	(b) Perimetritis	...	...	1	...	...	...	...	...	...	...	...	...	1
	785	Metritis	...	...	...	...	...	1	...	...	...	...	...	...	1
	797	Rupture of Uterus	...	...	3	...	...	...	1	2	...	...	...	...	6
	821	Menorrhagia	...	1	...	...	...	...	...	...	...	...	...	...	1
Affections Connected with pregnancy.		Affections Connected with Pregnancy.													
	834	Abortion	...	...	1	2	1	...	1	...	1	1	1	2	10
	838	(a) Extra-uterine Pregnancy	...	...	...	...	...	...	...	1	...	...	...	...	1
Affections connected with Parturition	842	Haemorrhage	...	...	...	1	...	...	1	...	...	1	...	1	4
	848	Retention of the Placenta	...	...	...	...	...	...	1	...	...	...	...	...	1
	850	Asphyxia of Child	...	1	...	...	...	2	1	...	1	1	1	...	7
	852	Premature Birth	...	91	97	76	68	63	68	90	77	105	117	136	1112
		Difficult Labour	...	1	2	3	3	5	3	3	1	...	2	1	24

Diseases of the organs of locomotion.															Affections consequent on parturition.														
903	Arthritis	...	...	...	1	1	...	...	...	1	2	...	1	2	...	5	1	2	15				
952	Cellulitis	...	...	...	5	2	2	4	1	4	3	1	5	1	2	...	1	2	31							
962	Eczema	...	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...	3
966	Carbuncle	...	...	...	2	...	...	...	...	3	2	1	3	...	1	...	1	1	13			
968	Bed Sore	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
General Injuries.																													
1025	Effects of Heat (a) Burns and scalds	...	...	...	8	6	6	2	3	...	2	2	2	1	2	3	...	...	37					
1080	Suffocation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	by Drowning accident	...	...	...	...	9	5	12	7	3	8	7	...	9	6	4	...	...	70				

Annual From No. XX.—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.—(Continued.)

	No in the Nomenclature of Diseases.	Causes of Death,	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
General Injuries.		Suffocation by drowning Suicidal.	3	3	6	3	2	3	3	4	..	2	2	1	32
		” by Hanging Suicidal.	..	..	..	..	1	2	..	..	..	..	..	..	3
	1031	Starvation	1	1	..	2	..	..	..	1	..	..	..	..	5
	1033	Shock	..	4	3	..	4	..	2	1	3	5	4	..	26
		Train Accident	..	1	..	1	..	..	1	1	..	..	..	..	4
		Motor Accident	..	..	..	3	..	..	..	1	..	1	..	..	5
Local Injuries.		Local Injuries. Injuries of the Head.													
	1092	Fracture of the skull	1	2	1	2	1	1	..	1	..	..	1	1	11
	1098	Compression of Brain	..	..	..	..	..	1	..	..	..	1	..	..	2
	1101	Gun, shot wound	..	..	..	..	..	..	..	..	1	..	1	1	3
	1133	Injuries of the Neck (Exclusive of the vertebral column). Fracture of Larynx	..	..	1	..	..	..	..	..	..	..	..	..	1

Local Injuries—(contd)	1135	Wound of Neck	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
		Injuries of the Chest	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1145	Fracture of Ribs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	1156	Multiple Injuries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
		Injuries of the Back (Including the Whole Vertebral Column).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1160	Fracture of Spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
		Injuries of the Lower Extremities	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1227	Fracture of Femur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
		Ill-defined and Non-Specified Causes.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Debility	...	...	...	...	...	...	...	...	...	...	...	...	...	...	186
		Old age	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2733
		Natural causes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24

TABLE A

Comparative statement of deaths from some of the Principal diseases during the past 12 years.

Years.	Births.		Deaths.		Small-pox.		Malaria.		Other Fevers.		Other Infectious Diseases.		Plague.		Diarrhoea, and Dysentery.		Respiratory Diseases.		Infantile Mortality under 1 year.		Deaths of Children Between 1 to 5 years.		Still-Births.
	No. of Births registered exclusive of Still-births.	Birth-rate.	No. of Deaths registered exclusive of Still-births.	Death-rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	
1912	20099	38.8	20132	38.8	106	0.2	2934	5.7	999	1.9	927	1.8	1	0.002	4,897	9.4	2,671	5.2	5,628	280.4	2,951	67.2	674
1913	19470	37.5	20675	39.9	34	0.06	2788	5.4	1043	2.0	1232	2.4	3	0.005	5,193	10.0	2,700	5.2	5,713	293.4	3,296	75.1	642
1914	18241	35.5	24174	46.6	66	0.1	2658	5.1	786	1.5	2306	4.4	2	0.004	5,508	10.6	3,762	7.3	5,635	308.9	3,740	85.2	606
1915	18331	35.3	18688	36.0	92	0.2	1686	3.3	644	1.2	555	1.1	...	...	4,208	8.1	3,062	5.9	5,244	286.1	2,748	62.6	650
1916	21675	41.8	17872	34.5	476	0.9	763	1.5	528	1.0	443	0.9	11	0.02	3,664	7.1	3,727	7.2	5,746	265.1	2,742	62.5	975
1917	23296	44.9	19917	38.4	195	0.4	859	1.7	575	1.1	654	1.3	6	0.01	4,131	7.9	4,360	8.4	6,460	277.3	2,945	67.1	1,077
1918	19897	38.4	31262	60.3	272	0.5	881	1.7	4837	9.3	542	1.0	22	0.04	5,533	10.7	7,006	13.5	7,068	355.2	4,914	112.0	834
1919	18936	36.5	27187	52.4	611	1.2	736	1.2	2574	5.0	1288	2.5	14	0.03	5,835	11.3	5,148	9.9	6,230	329.0	4,595	104.7	837
1920	21396	41.3	21418	41.3	109	0.2	560	1.1	1780	3.4	1995	3.8	8	0.02	4,671	9.0	4,428	8.5	5,976	279.3	3,654	83.3	1,172
1921	19187	36.4	20268	38.5	180	0.3	652	1.2	1475	2.8	708	1.3	3	0.006	4,149	7.9	4,467	8.5	5,408	281.9	3,273	79.9	1,136
1 922	21650	41.1	22475	42.7	1121	2.1	763	1.4	1325	2.5	612	1.2	1	0.002	4,167	7.9	4,911	9.3	6,669	308.0	4,113	100.4	1,274
1923	22975	43.6	19933	37.9	151	0.3	783	1.5	769	1.5	363	0.7	1	0.002	3,778	7.2	4,610	8.7	5,837	254.5	3,272	79.9	1,312

TABLE B.

Rainfall.

Years.	1st Quarter.	2nd Quarter	3rd Quarter	4th Quarter	Total.
	January to March.	April to June.	July to September.	October to December.	
	Inches.	Inches.	Inches.	Inches.	Inches.
1918 ...	10.25	7.60	6.96	50.19	75.00
1919 ...	2.33	2.52	16.06	29.87	50.78
1920 ...	5.66	1.92	4.75	51.56	63.89
1921 ...	5.46	2.64	18.18	28.15	54.43
1922 ...	3.42	2.48	8.92	50.87	65.69
1923 ...	5.10	1.99	8.16	22.08	37.33

TABLE C.

Table of Births, Deaths and Infantile Death-rates for the different races in the city for 1922 and 1923.

Race or Caste.	Population according to Census of 1921.	1922.						1923.					
		Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rate.	Infantile Death-rates.	Infantile Death-rates.	Total No. of Births.	Birth-rates.	Total No. of deaths.	Death-rate.	Infantile Deaths.	Infantile Death-rates.
Europeans ...	2,938	94	32.0	40	13.6	5	53.2	82	27.9	43	14.6	7	85.4
Anglo-Indians ...	9,002	353	39.2	251	27.9	58	164.3	374	41.6	288	32.0	63	168.5
Indian-Christians ...	32,196	1,039	32.4	940	29.3	219	233.0	1,053	32.8	886	27.6	164	155.7
Hindus ...	4,27,722	17,796	41.6	18,627	43.5	5,736	307.9	18,798	44.0	16,324	38.2	5,265	280.1
Mahomedans ..	53,163	2,365	44.5	2,612	49.1	651	275.3	2,662	50.1	2,388	44.9	338	127.0
Others ...	1,890	3	1.6	5	2.6	...	...	6	3.2	4	2.1	...	...
Totals ...	5,26,911	21,650	41.1	22,475	42.7	6,669	308.0	22,975	43.6	19,933	37.8	5,837	254.0

TABLE D.

Total of Birth and Death rates of Principal Sub-Divisions of the Hindu Community for 1922 and 1923.

Names of Communities	Population.	1922.				1923.			
		Total Births.	Birth rates.	Total Deaths.	Death rates.	Total Births.	Birth rates.	Total Deaths.	Death rates.
Brahmins ...	47,969	1,354	28.2	1,323	27.6	1,247	26.0	1,082	22.6
Chetty ...	36,332	1,478	40.7	1,439	39.6	1,309	36.0	1,193	32.8
Vallalah or Mudaliar.	69,617	2,833	46.9	2,745	39.4	2,900	41.7	2,316	33.3
Balijah or Naidu ...	49,835	1,591	31.9	1,687	33.9	1,809	36.3	1,605	32.2
Vanniah or Naicker ...	50,058	2,700	53.9	2,670	53.3	2,840	57.3	2,386	48.1
Adi-Dravida ...	58,568	2,686	45.9	2,835	48.4	2,593	44.3	2,202	37.6
Patnavar ...	10,456	326	31.4	417	39.9	488	46.7	669	64.0
Yadaval or Idayar ...	15,269	657	43.0	674	44.1	615	40.3	530	34.7
Viswa Brahmin or } Kammalar }	13,806	685	49.6	693	50.2	662	47.9	575	41.7

TABLE E.

Table of Births, Deaths and Infantile Death-rates by months for 1922 & 1923.

Months.	1922.						1923.					
	Total No of Births.	Birth-rates.	Total No. of Deaths.	Death rates	Infantile Deaths.	Infantile Death rates on 1,000 Live Births.	Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rates	Infantile Death.	Infantile Death rates on 1,000 Live Births.
January	1,552	35.3	1,849	42.2	578	369.2	1,759	40.1	2,132	48.6	618	351.3
February	1,300	29.6	2,037	46.7	591	454.6	1,609	36.6	1,838	41.9	509	316.3
March	1,662	37.9	2,322	55.3	647	389.3	2,020	46.0	1,791	40.8	477	236.1
April	1,716	39.1	2,099	48.0	590	343.8	1,940	44.2	1,570	35.8	403	207.7
May	1,797	40.9	1,850	42.5	508	282.7	1,942	44.2	1,484	33.8	417	214.7
June	1,799	41.0	1,649	37.8	483	268.5	1,737	39.6	1,377	31.4	399	229.7
July	2,020	46.0	1,611	36.7	471	233.2	1,901	43.3	1,518	34.6	483	254.1
August	2,150	49.0	1,585	36.1	505	234.9	1,964	44.7	1,473	33.5	433	220.5
September	2,050	46.7	1,629	37.1	451	220.0	2,007	45.7	1,393	31.7	430	214.3
October	2,032	46.3	1,876	42.7	573	282.0	2,096	47.7	1,502	34.2	462	220.4
November	1,819	41.4	1,862	42.4	599	329.3	2,037	46.4	1,766	40.2	569	279.3
December	1,753	39.9	2,106	48.0	678	336.8	1,963	44.7	2,089	47.6	637	324.5
Total	21,659	41.1	22,475	42.7	6,669	308.0	22,974	43.6	19,933	37.8	5,837	254.0

TABLE F.

Ratio of deaths among Children under one year per 1,000 live births registered
in each Division for 1922 and 1923.

Division.	1922.		1923.	
	Infantile Mortality.	Infantile death rate.	Infantile Mortality	Infantile death rate.
1	233	286.2	304	349.9
2	274	283.6	245	248.5
3	390	333.1	330	273.2
4	242	304.0	194	238.3
5	89	342.3	81	405.0
6	135	385.7	91	287.0
7	155	328.4	146	305.4
8	50	342.5	51	369.6
9	210	301.7	199	289.7
10	238	373.6	194	271.0
11	72	433.7	61	329.7
12	225	309.1	232	325.8
13	267	423.1	185	295.0
14	45	500.0	21	295.7
15	192	360.9	165	309.0
16	262	261.7	246	203.2
17	352	329.9	272	241.0
18	253	306.7	201	205.5
19	276	332.1	214	236.2
20	315	258.6	298	232.0
21	210	310.7	175	250.0
22	198	281.7	170	215.4
23	376	323.6	230	249.6
24	313	255.4	307	214.5
25	138	218.4	146	221.9
26	178	275.5	160	216.5
27	231	302.4	194	249.7
28	272	212.6	262	260.5
29	267	296.0	240	237.2
30	206	318.9	173	252.2
Total ...	6,669	308.0	5,837	254.0

TABLE G.

Table of Infantile Mortality by months in the year 1923.

Months.	Small-pox.	Measles.	Malaria.	Other Fevers.	Diarrhoea and Dysentery.	Premature Birth.	Debility.	Nervous System.	Respiratory System.	All other causes.	Total for 1923.			Total of all causes for 1923.
											Males.	Females.	Total.	
January ...	5	1	1	19	101	124	50	143	116	58	329	289	618	573
February ...	5	...	...	11	93	91	51	120	93	45	276	233	509	591
March ...	6	1	1	13	72	97	47	119	75	46	264	213	477	647
April ...	6	...	...	15	65	76	37	89	75	40	198	205	403	590
May ...	2	...	1	16	71	68	44	97	88	30	242	175	417	508
June ...	...	...	...	7	76	63	37	102	89	25	216	183	399	483
July ...	3	1	...	12	119	68	41	103	100	36	257	226	483	471
August ...	...	...	1	15	72	90	29	99	87	40	233	200	433	505
September ...	1	...	...	4	80	77	31	110	83	44	228	202	430	451
October ...	...	...	...	2	64	105	29	137	89	36	258	204	462	573
November ...	...	...	1	13	93	117	33	160	103	49	317	252	569	599
December ...	...	...	2	18	114	316	47	161	113	46	326	311	639	678
Total ..	28	3	7	145	1,020	1,112	476	1,440	1,111	495	3,144	3,693	5,837	6,669

CAUSES OF INFANTILE DEATHS 1923,

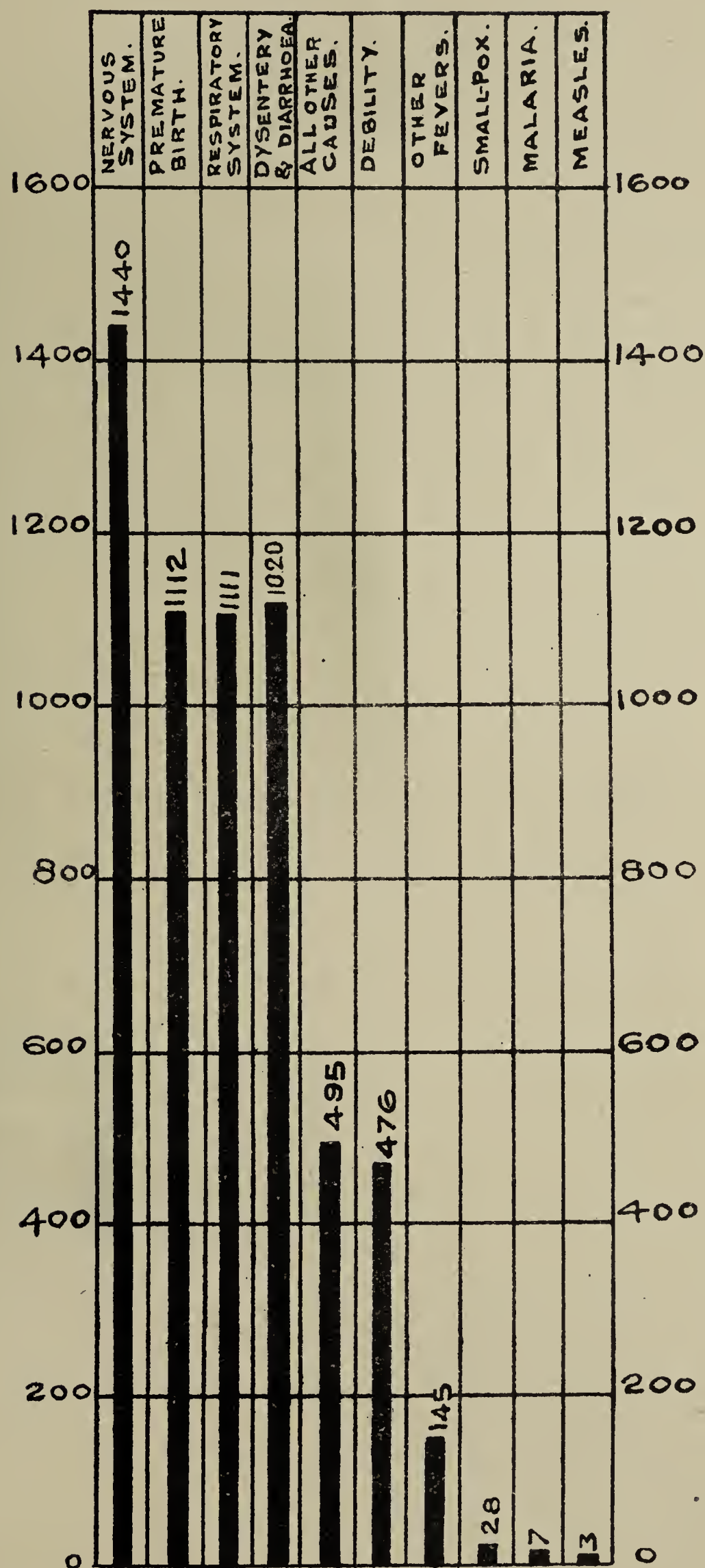


Table of Percentage of Infantile Deaths from Principal causes in the year 1923.

Age periods	Small pox.		Meas- les.		Mala- ria.		Other Fevers.		Diarrhoe and Dysentery.		Premature Birth.		Debility.		Nervous System.		Respiratory System.		All other Causes.		Total.	
	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.
Under 7 days	...	...	...	...	...	...	6	0.37	43	2.64	697	42.70	198	12.14	336	20.60	135	8.28	216	13.24	1631	27.94
7 days and under 1 month.	...	...	...	...	...	...	8	0.88	62	6.47	381	39.72	91	9.49	242	25.23	87	9.07	88	9.18	959	16.43
1 month & under 4 months.	4 0.40	...	...	...	...	...	29	1.91	210	21.08	31	3.11	37	8.73	365	36.65	218	21.89	52	5.22	996	17.06
4 months & under 7 months.	8 0.94	...	3 0.35	1 0.12	49	4.72	49	4.72	247	29.16	3	0.35	44	5.19	210	24.79	214	29.16	44	5.19	847	14.51
7 months & under 10 months.	8 0.95	...	...	2 0.24	41	4.89	41	4.89	259	30.91	...	...	39	4.65	171	20.41	267	31.86	51	6.09	838	14.36
10 months & under 1 year ...	8 1.41	...	...	4 0.71	21	3.71	21	3.71	199	35.16	...	...	17	3.00	116	20.49	157	27.74	44	7.77	566	9.70
Total	28 0.48	...	3 0.05	7 0.12	145	2.48	145	2.48	1020	17.47	1112	19.05	476	8.16	1440	24.67	1111	19.03	495	8.48	5837	25.40

TABLE I.
Percentage of deaths of infants during the neo-natal and post-neo-natal periods to total deaths under one year
1913—1923.

Year.	Deaths of infants under one month.		Deaths of infants aged one month and under three months.		Deaths of infants aged 3 months and under 12 months.		Total No. of Deaths.	Infantile mortality rate per 1000 live births.	Percentage of Infant deaths to total deaths.
	Number.	Percentage to total infant deaths.	Number.	Percentage to total infant deaths.	Number.	Percentage to total infant deaths.			
1913	2523	44.2	628	11.0	2562	44.8	5713	295.4	
1914	2522	44.8	675	12.0	2438	43.2	5635	308.9	
1915	2317	44.2	611	11.7	2316	44.1	5244	236.1	
1916	2568	44.7	771	13.4	2407	41.9	5746	265.1	
1917	2874	44.5	854	13.2	2732	42.3	6460	277.3	
1918	2650	37.5	891	12.6	3527	49.9	7068	355.2	22.6
1919	2237	35.9	805	12.9	3188	51.2	6230	329.0	22.9
			Deaths of infants aged 1 month and under 4 months.		Deaths of infants aged 4 months and under 12 months.				
	Number.	Percentage to total infant deaths.	Number.	Percentage to total infant deaths.	Number.	Percentage to total infant deaths.			
1920	2381	39.8	1245	20.8	2350	39.4	5976	279.3	27.9
1921	2178	40.3	969	17.9	2261	41.8	5408	281.9	26.7
1922	2865	42.9	1092	16.4	2712	40.7	6669	308.0	29.7
1923	2590	44.4	996	17.1	2251	38.5	5837	254.0	29.3

Statement No. I—showing the number of births (Divisional and Hospital) verified during the calendar year 1923 and the number of vaccination of infants under one year of age.

Divisions.	Total births excluding still-births.		Still-births.		Deaths under one year.		Number of infants surviving.		Number of infants vaccinated under one year.		Percentage of vaccination to births registered.	
	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	576	347	15	21	157	38	419	309	283	144	49.13	41.49
2	666	323	18	35	119	25	547	298	354	88	53.15	27.24
3	912	283	26	31	187	26	725	257	458	79	50.22	27.92
4	675	150	24	26	137	17	538	133	308	41	45.63	27.33
5	171	62	7	3	54	19	117	43	38	9	22.22	14.52
6	262	59	8	8	76	6	186	53	70	14	26.72	23.73
7	326	133	10	22	70	14	256	119	146	32	44.78	24.06
8	112	44	8	3	29	7	83	37	42	5	37.50	11.36
9	509	159	22	17	125	36	384	163	206	56	40.47	28.14
10	514	178	16	19	140	35	374	143	254	72	49.42	40.45
11	147	30	9	8	46	9	101	21	57	6	38.78	20.00
12	595	117	28	24	124	26	471	91	321	32	53.95	27.35
13	519	133	26	13	133	23	386	105	281	55	54.14	41.35
14	64	19	8	3	19	3	45	16	30	7	46.88	36.84
15	476	82	33	13	107	15	369	67	252	40	52.94	48.78
16	984	210	89	12	162	11	822	199	741	141	75.30	67.14
17	974	129	70	6	174	16	800	113	751	61	77.10	47.29
18	772	162	54	4	102	7	670	155	622	95	80.57	58.64
19	583	295	15	20	120	47	463	248	330	121	56.60	41.02
20	615	669	12	88	112	109	503	560	387	210	62.93	31.39
21	543	154	23	17	106	27	437	127	289	50	53.22	32.47
22	466	267	11	14	86	60	380	207	246	75	52.79	28.09
23	853	323	29	29	189	49	664	274	522	128	61.19	39.63
24	1151	259	34	25	155	22	996	237	545	64	47.35	24.71
25	491	162	20	30	93	24	398	138	216	26	43.99	16.49
26	617	98	29	21	108	25	509	73	324	27	52.51	27.55
27	601	138	20	14	116	11	485	127	222	22	36.94	15.94
28	730	258	33	11	149	26	581	232	443	152	60.68	58.91
29	769	243	27	27	156	57	613	186	486	130	53.19	53.49
30	544	123	22	3	102	17	442	106	304	58	55.88	47.15
Total.	17,217	5,649	746	567	3,453	812	13,764	4,837	9,528	2,040	55.34	36.11

Vaccination Statement No. 11—showing the number of Births verified in 1923 and the number of Infants vaccinated under one year of age.

Year.	Total number of births excluding still-births.	Number of children who died before attaining the age of one year without being vaccinated.	Number of children in column 2 who left the city before attaining the age of one year without being vaccinated.	Number of children in column 2 who were available for vaccination. (column 2 minus columns 3 and 4).	Number of children in column 5 who were vaccinated before they attained the age of one year.	Percentage of column 6 to column 5.	Number of children in column 5 whose vaccination was postponed beyond one year of age for medical reasons.
1	2	3	4	5	6	7	8
1921	16,252	3,066	3,354	9,832	8,749	89.00	
1921	4,888	680	944	3,264	1,723	52.80	4
1922	15,367	3,360	2,829	91,78	3,072	87.97	80
1922	4,934	812	904	3,218	1,604	49.84	23
1923	17,217	3,453	2,846	10,918	9,528	87.27	125
1923	5,649	812	903	3,934	2,040	51.86	49

NB—The antique figures denote Hospital births.

Vaccination Statement No. III —Showing particulars of Vaccination during the Calendar year 1923.

Divisions	Districts.	3	4	5	Total No. of persons Vaccinated.			Average No. of persons vaccinated by each Vaccinator.	Primary vaccination.					Re-Vaccination					Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1000 of Population	Average annual No. of persons successfully vaccinated during the previous 5 years.		Average annual No. of deaths from small-pox during the previous 5 years.	Average cost of each successful Vaccination.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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					Males.	Females.	Total.		Under one year.	One year and under six.	Six years and above.	Total.	Unknown.	Total.	Successful.	Unknown.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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CORPORATION OF MADRAS.



(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

[Health Officer]

Health Department.

of the City of Madras

FOR THE YEAR

.1923.

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